

# Abstracts Book

Oral & Poster Communications

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**XVI WORLD CONGRESS OF PSYCHIATRY**  
**"FOCUSING ON ACCESS, QUALITY AND HUMANE CARE"**  
MADRID, SPAIN | September 14-18, 2014

Volume

2



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Topic

6

# Brain and Pain

abstracts - volume 2

## PSICOPROFILAXIS AND ITS IMPORTANCE IN CHILDBIRTH

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**Objectives:** Report on the importance of preparation for childbirth.

**Methods:** Literature search bases Elsevier, CINAHL, PubMed, SciELO, Biomedicine and consultation web pages from government agencies data. The study period covers from 2000 to 2014. The descriptors used were "psycho", "gestation", "delivery" and "pregnancy".

**Results:** The Psicoprofilaxis is the use of relaxation methods to reduce fear and anxiety childbirth.

The NICE guideline considers the experience of women during labor is highly variable and is influenced by several factors, including the expectations, readiness, delivery complexity and severity of pain experienced.

Antepartum preparation should provide adequate information, to have realistic expectations, including pain and its relief, and learning self-management techniques is encouraged. En1933 a prophylactic method of delivery without fear, based on theoretical education and suggestion of wellbeing and relaxation, making it possible the painless delivery in women without fear or negative emotions is proposed. Studies conducted 1993 say the dogma of painful labor creates a fear of pain responsible for anticipation. WHO recommends relaxation techniques within practices clearly useful as a noninvasively method of pain relief in the first stage of labor.

**Conclusions:** There is a lack of scientific evidence on the effectiveness of breathing and relaxation techniques in reducing pain during labor measured.

They are more accurate scientific studies to prove charge.

## **SUBJECTIVE PAIN OF CHILDBIRTH**

A. Sánchez Gómez<sup>3</sup>, R. González Segura<sup>1</sup>, M.M. Huertas Pérez<sup>1</sup>, N. Benayas Pérez<sup>1</sup>, S. Sánchez Ortueta<sup>2</sup>, M.C. Valero Soto<sup>3</sup>

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**Objectives:** To determine whether the pain associated with labor contractions, have some relation to the subjectivity of each person.

**Methods:** Literature search bases Elsevier, CINAHL, PubMed, SciELO, Biomedicine data. The study period covers from 2004 to 2014. The descriptors used were "pain", "gestation", "subjectivity", "delivery" and "pregnancy."

**Results:** Pain is an established and influenced from the cultural field experience. It is a mediator personality trait that cannot be addressed as an isolated fact, but as an experience that feeds and determines from a particular socio-historical process. English obstetrician Grantley D. Read (1933) concluded that pain in childbirth could be "something" pathological, in which fear triggers an organic defense mechanism, which in the case of fear of childbirth, manifested by uterine spasms and contracture of the muscles of the pelvic floor, which not only retains childbirth difficult and painful but. In the middle of last century, testimonies of women who had orgasmic births were collected; Merelo Barbera, presented a report, claiming that it was possibly due to births in more natural conditions, and insisted that it was more common than we ordered thinking.

**Conclusions:** In light of the literature, it appears that the dogma of painful labor was and is an invention of our society, which has led to a fear of expectation responsible, in large part, many of the pain experienced by women during childbirth phase.

## **ROLE OF FLUNARIZINE IN TREATMENT OF HEADACHE IN DEPRESSION; COMPARISON TO ANTIDEPRESSANT USED AS PROPHYLAXIS OF MIGRAINE AND EMERGENCE PREVENTION OF HEADACHE IN DEPRESSION**

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In our previous study of on depressive patient were shown appearance of pulstile headache as a most common type of headache mostly located on bilaterally on temporal region and hypothesized that it as a intermediate phenomenon .depression itself ,or may be due to social and cultural was identified as a psychiatric suffering that was not recognized as a illness hence thought as iceberg .It is well evident as migraine and depression is interchangeable and has bidirectional relationship Tension band like headache is earliest to be recognized but it remained poorly recognized possibly may be due more pain tolrence , depression itself and social and cultural variation

The drug used in the treatment of migraine and depression is little bit more comprehensible to understand . The use propranolol and flunarizine has depressant properties in long term . Simultaneously the use of flunarizine with SSRIS warn induction of hyperserotonergic syndrome as FDA black box sign .Author has discrete opinion on use of flunarizine in treatment of headache in depression The area of interest with contradictory reports on use of flunarizine .We try to find out role of flunarizine in preventing appearance of depression and transformation of tension band headache , throbbing headache into migraine and finally into depression

## **FIBROMYALGIA, EARLY TRAUMA AND PSYCHIATRIC COMORBIDITIES – IS THERE A CONNECTION?**

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### **Objectives**

Fibromyalgia (FM) is a controversial syndrome characterized by widespread musculoskeletal pain for at least three months and is frequently associated with psychiatric comorbidities such as anxiety and depression. Several hypothesis have been suggested for its etiology, namely the role of environmental factors (traumatic events) on the development of these disorders, mainly involving the Hypothalamus-Pituitary-Adrenal (HPA) axis and the Autonomic Nervous System (ANS).

The main goal of this study is try to understand if female patients with fibromyalgia have had a bigger history of early traumatic events compared to their healthy sisters and which dimension of trauma was more frequent. Also, we tried to ascertain if the mother corroborated those traumatic events, or if they had been hyper valorized as traumatic.

### **Methods**

Population consisted in 20 families composed by a daughter with FM, a healthy sister and their mother. We used the Early Trauma Inventory to access the history of traumatic events on the lives of patients and controls. Also, the mother answered the same questionnaire regarding each daughter. The Hospital Anxiety and Depression Scale has been used to measure depression and anxiety levels.

### **Results**

Results showed that the FM patients reported a higher number of early traumas, opposing to their healthy sisters. This information has been corroborated by the mother. The most frequent dimension of trauma reported was “General Trauma”. Also, a positive correlation has been established between the incidence of traumatic events and high levels of anxiety and depression on the patients.

### **Conclusions**

The hypothesis that early traumatic events are associated with the development of FM in the future has been confirmed. In this population it's clear that more traumas occurred in the FM patients, and less on the healthy sisters. This fact is recognized by their mothers and is also related to the development of psychiatric disorders such as anxiety.

## **THE ROLE OF PSYCHOLOGICAL FACTORS IN CHRONIC PAIN**

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### **Objectives**

To describe the psychological factors that shape the experience of pain and to review which psychotherapeutic interventions may influence those factors.

### **Methods**

Non-systematic review of the scientific literature.

### **Results**

According to our research, a number of factors that modulate the experience of pain are described, namely depression, anxiety, coping strategies and negative cognitions. These factors can be addressed through several psychotherapeutic interventions, including cognitive behavioral therapy. Therefore, these variables can be potentially modifiable, unlike other reported in the literature, such as gender or age.

### **Conclusions**

Chronic pain is a global problem that affects a significant percentage of the world population. Therefore, it is necessary to continue developing therapeutic techniques to approach this condition, in a way that complements the psychopharmacological treatment. Only through the combination of therapeutic strategies we can aim to reduce disability associated to chronic pain and optimize the quality of life of patients.

## THE EFFECTS OF NMDA ANTAGONISTS KETAMINE AND MAGNESIUM IN LOWERING BODY TEMPERATURE IN RATS

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**Objectives:** Ketamine and magnesium, both NMDA receptor antagonists, are known for their anesthetic, analgesic and anti-shivering properties. This study is aimed at evaluating the effects of ketamine and magnesium sulphate on body temperature in rats, and to determine the type of interaction between them.

**Methods:** The body temperature was measured by insertion of a thermometer probe 5 cm into the colon of unrestrained male Wistar rats (200-250 g).

**Results:** Magnesium sulphate (5 and 60 mg/kg, sc) showed influence neither on baseline, nor on morphine-evoked hyperthermic response. Subanesthetic doses of ketamine (5-30 mg/kg, ip) given alone, produced significant dose-dependent reduction in both baseline colonic temperature and morphine-induced hyperthermia. Analysis of the log dose-response curves for the effects of ketamine and ketamine-magnesium sulphate combination on the baseline body temperature revealed synergistic interaction, and about 5.3 fold reduction in dosage of ketamine when the drugs were applied in fixed ratio (1:1) combinations. In addition, fixed low dose of magnesium sulphate (5 mg/kg, sc) enhanced the temperature lowering effect of ketamine (1.25-10 mg/kg, ip) on baseline body temperature and morphine-induced hyperthermia by factors of about 2.5 and 5.3, respectively.

**Conclusion:** This study is first to demonstrate the synergistic interaction between magnesium sulphate and ketamine in a whole animal study and its statistical confirmation. It is possible that the synergy between ketamine and magnesium may have clinical relevance.

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3. Ogden, K.K., Traynelis, S.F., 2011. New advances in NMDA receptor pharmacology. *Trends Pharmacol Sci.* 32, 726-33.

## THE “PANIC” WAY TO PAIN: A BIDIRECTIONAL MODEL OF MIGRAINE AND PANIC DISORDER

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### Objectives

Panic disorder and migraine have a bidirectional relationship, with each condition increasing the incidence of the other. In migraineurs, central sensitization to pain and its clinical marker (cutaneous allodynia) are indicative of a state in which abnormally hyperexcited neural networks cause reduced pain threshold and hypersensitivity to algogen stimuli. Brain networks implicated in pain processing are also linked to anxiety associated circuitry: this interconnected way is involved in Anxiety Sensitivity, namely the fear of anxiety-related sensations. We hypothesized that anxiety-related belief systems and pain-related behaviours can affect the development of both panic and migraine attacks either directly, through neuronal hyperexcitability and central pain dysmodulation, or indirectly, through pathways such as medication overuse.

### Methods

A clinical sample of outpatients who met ICHD-II criteria for migraine and DSM-5 criteria for panic disorder was assessed with the following instruments: Migraine Disability Assessment, Anxiety Sensitivity Index-3, Allodynia Symptom Checklist, Lifetime Panic-Agoraphobic Spectrum. Regression analysis was performed to evaluate the relationship between the collected variables.

### Results

Allodynia severity showed a strong direct loading on Anxiety Sensitivity ( $p=.001$ ). Significant associations between panic agoraphobic spectrum and both “physical” subdomain of Anxiety Sensitivity ( $p<.0001$ ) and “thermal” subdomain of allodynia, specifically mediated by C and A $\delta$  nociceptive fibers, ( $p=.002$ ) were also found. Furthermore, after performing regression analysis, “thermal” allodynia and “physical” concerns of Anxiety Sensitivity resulted good predictors of both panic agoraphobic spectrum ( $p=.001$ ) and migraine disability ( $p=.002$ ).

### Conclusions

Anxiety sensitivity and associated central sensitization to pain have been shown to be predictive of panic agoraphobic spectrum, probably increasing the likelihood of suffering from migraine and exacerbating pain intensity. The hyperexcitable trigeminovascular system may trigger the same neural networks that have elicited its own activity at first, leading to a bidirectional traffic of perpetual feedback that drives panic and migraine attacks.



## **WPA-0176 COGNITIVE BEHAVIORAL THERAPY INCREASES PREFRONTAL CORTEX GRAY MATTER IN PATIENTS WITH CHRONIC PAIN**

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Several studies have reported reduced cerebral gray matter (GM) volume/density in chronic pain conditions, but there is limited research on plasticity of the human cortex in response to psychological interventions. We investigated GM changes after cognitive behavioral therapy (CBT) in patients with chronic pain. We used voxel based morphometry (VBM) to compare anatomical MRI scans of 13 patients with mixed chronic pain types before and after an 11-week CBT treatment and to 13 healthy control subjects. CBT led to significant improvements in clinical measures. Patients did not differ from healthy controls in GM anywhere in the brain. After treatment, patients had increased GM in bilateral dorsolateral prefrontal (DLPFC), posterior parietal (PPC), subgenual anterior cingulate (ACC)/orbitofrontal, and sensorimotor cortices, as well as hippocampus, and reduced GM in supplementary motor area. In most of these areas showing GM increases, GM became significantly higher than in controls. Improved pain catastrophizing was associated with increased GM in left DLPFC and ventrolateral prefrontal (VLPFC), right PPC, somatosensory cortex, and pregenual ACC. We propose that increased GM in the PFC and PPC reflects greater top-down control over pain and cognitive reappraisal of pain, while changes in somatosensory cortices reflect alterations in the perception of noxious signals.

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Topic

7

# Child and Adolescent Mental and Behavioral Disorders

abstracts - volume 2

## PREVALENCE AND CORRELATES OF PROBLEM BEHAVIOURS IN CHILDREN WITH INTELLECTUAL DISABILITY

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**Background:** Children at risk for and identified with Intellectual disability (ID) appear to be particularly vulnerable to the development and maintenance of some form of significant stereotypic behavior, self-injurious behavior (SIB) and aggression over the course of their lifetime<sup>1,2</sup>.

**Aims and objectives:** This study aimed to assess the prevalence and correlates of problem behaviors in children with intellectual disability.

**Methodology:** Study was conducted at outpatient child and adolescent psychiatry department of NIMHANS, Bangalore, India. All children (4-12 years) clinically diagnosed with intellectual disability with DSM-IV criteria were evaluated using Vineland social maturity scale- Malin's Indian adaptation (VSMS), Conner's abbreviated ADHD rating scale, Childhood autism rating scale (CARS), and Behavioral Problems Inventory (BPI-1)

**Results:** 86% of children recruited were males; majority belonged to Hindu religion, rural background and lower socioeconomic status. 24% had co-morbid seizure disorder, 38% were on psychotropics or antiepileptic medications, mean social age were 33. 2±16.5 months mean social quotient was 38.9±13.5 months, 26% had mild ID, 34% had Moderate ID, 24% severe, and 16% had profound ID. Psychiatric co- morbidity was present in 36% of children with ID; majority being ADHD, some type of SIB was present in 78%, stereotypies in 72% and one or other type of aggression in 92% of children. Stereotypies showed negative correlation with communication subscale of VSMS,

**Conclusions:** Current study is first of its kind from a child and adolescent specialty clinic in India. Children with communication difficulty and co morbid disorders like ADHD had more problem behaviors. High prevalence of problem behaviors children with ID demands attention and establishment of specific management protocols for handling these symptoms.

### References

1. Oliver C., Murphy G. H. & Corbett J. A. (1987). Self injurious behavior in people with mental handicap: a total population study. *Journal of Mental Deficiency Research* 31, 147–62.
2. Gratz, K. L. (2003). Risk factors for and functions of deliberate self-harm: An empirical and conceptual review. *Clinical Psychology: Science and Practice*, 10, 192–205.

## **CATATONIA IN AUTISM SPECTRUM DISORDER: A CASE REPORT AND REVIEW OF THE LITERATURE**

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**Objectives:** Catatonia is a severe complication of autism spectrum disorders characterized by increased slowness, difficulty in initiating actions, and increased passivity. The aim of this study is to describe a case of a patient diagnosed with autism spectrum disorder who presented with catatonia and to provide a review of literature.

**Methods:** Previous studies of catatonia associated with autism spectrum disorder are reviewed along with a case presentation from our institute.

**Results:** Increasing recognition is being given to catatonic symptoms presenting in children and adolescents with autism spectrum disorder. Recent studies report that high doses of benzodiazepines and the use of electroconvulsive treatment are effective in these conditions.

**Case report:** A 15 year-old girl with catatonic symptoms was referred to our institute for inpatient care. She was diagnosed as autism spectrum disorder due to poor social interaction and restricted/repetitive behaviors. She presented with freezing in peculiar postures with difficulty initiating movement, slow verbal responses, abnormal repetitive movements, and difficulty crossing demarcation lines. Complete remission of catatonic symptoms was achieved by improvement of family functioning and provision of safe and organized environment along with 6 mg per day of lorazepam.

**Conclusions:** The present case report suggests that psychological stress can be a precipitating factor for exacerbation of catatonia in patients with autism spectrum disorder. High dose lorazepam may be effective and well tolerated in treating catatonic symptoms of autism spectrum disorder.

## **EFFICACY OF FLUOXETINE IN DEVELOPMENTAL COORDINATION DISORDER IN CHILDREN**

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**Introduction:** Developmental Coordination disorder (DCD) is a motor skill disorder that interferes with children's ability to perform day to day activities in ~5-6% of otherwise healthy school-age children (majority boys). In addition to their motor coordination problem it generally interferes with academic performance, social integration and self esteem.

**Hypothesis:** DCD is a heterogeneous disorder with varied etiology; hence, there is no specific pharmacotherapy. Intervention, therefore, mostly includes occupational therapy, parent education and management of coexisting problems. The present study aims to assess any possible role of Fluoxetine in these children.

**Methods:** 16 healthy boys were recruited from a child development clinic in north Kolkata, age 8-12 yrs, clinically diagnosed with DCD. Inclusion Criteria: Diagnosis of DCD, based on DSM IV criteria and a score below the suspected clinical cutoff on the Parent-reported Movement Assessment Battery for Children-Checklist for DCD (<15th percentile). Exclusion Criteria: 1) Intellectual disability; 2) ADHD; 3) orthopedic or rheumatologic impairments; 4) Tic disorders; 5) acquired brain injury; 6) severe sensory loss (visual /auditory); 7) other psychiatric disorders.

**Procedure:** Participants were randomly divided into 2 groups. One who would receive Fluoxetine (Experimental) and the other who would receive Placebo (Control). Fluoxetine was administered in the dosage of 10mg/day and continued for a period of 3 months. Participants were followed up periodically for any adverse effects, which were negligible in the present study and there was no drop out.

**Assessment:** Participants were assessed using Children's Global Assessment Scale (CGAS) at the beginning and end of the study period (3 months) and were statistically analyzed.

**Results:** Significant difference between the mean score of the control and the experimental group at the outset of the study was not found from the computed t score. Furthermore, there was no significant difference between mean global score of the control group before and after placebo administration was found. Finally, when t score was computed in the experimental group before and after administration of Fluoxetine, statistically significant difference in the mean global score was noticed.

**Discussion:** It is an established fact that a condition like DCD doesn't really improve on pharmacotherapy. Hence, Fluoxetine, an SSRI and the most commonly prescribed antidepressant for children, cannot be expected to bring any change in the motor functionality of the children suffering from DCD, but, as the present study suggests, it may help the victims cope with the disorder better, probably by boosting self esteem.

**Conclusion:** It can be concluded that participants responded better after administration of Fluoxetine in comparison to the ones who received placebo when overall clinical assessment was concerned.

## **DISCHARGE OF ADOLESCENTS WITH MENTAL HEALTH PROBLEMS AGAINST MEDICAL ADVICE: FINDINGS FROM ADULT MENTAL HEALTH INPATIENT FACILITIES ACROSS ONTARIO, CANADA**

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**Objectives:** Little is known about adolescents with mental health problems who are discharged against medical advice (DAMA). The objective of the current study was to examine the prevalence of DAMA and explore factors that influence DAMA among adolescents with mental health problems in a large sample from Ontario, Canada.

**Methods:** Analyses were based on discharge records of 1811 youth 14-18-years-old ( $M=17.69$ ,  $SD = 1.05$ ) admitted to adult mental health facilities. Data was collected using the interRAI Resident Assessment Instrument-Mental Health (RAI-MH). The RAI-MH is a multi-source standardized assessment completed by trained clinical assessors. Variables included age, gender, Aboriginal origin, residential instability, admission status (voluntary versus involuntary admission), education, length of stay, insight into mental illness, and provisional DSM-IV diagnostic categories.

**Results:** Analyses were conducted using Chi square, ANOVA, and logistic regression analyses. There were 78 (4.3%) youth who were discharged against medical advice. The following variables increased the odds of DAMA: limited or no insight into mental illness, substance-related disorders, eating disorders, and personality disorders. Length of stay was negatively related to DAMA. Youth who had no insight into their mental illness were 7.85 times more likely to DAMA than their counterparts. The odds of DAMA for youth with an eating disorder were 4.20 times more likely than youth without this diagnosis.

**Conclusions:** The findings from this study demonstrate that youth at risk for DAMA can be identified at admission using comprehensive assessments; implications for triaging, care planning and case management are discussed.

## **PREVALENCIA DE TRASTORNOS DE ANSIEDAD EN NIÑOS CON SOBREPESO U OBESIDAD, EN BOGOTÁ, COLOMBIA, SURAMERICA**

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**Objetivo:** Evaluar la frecuencia de trastorno de ansiedad en niños entre los 8-14 años con diagnóstico de sobrepeso u obesidad que asisten a la consulta de filtro de endocrinología pediátrica en el Hospital Militar Central, en Bogotá, Colombia, Sur América.

**Materiales y métodos:** Se seleccionó una muestra de 184 participantes, a los cuales se les aplicó dos escalas psicométricas: Escala de evaluación de ansiedad en niños y adolescentes y Escala breve de evaluación psiquiátrica. Posteriormente estos datos fueron consignados en una base de datos para su procesamiento y análisis. Se realizó un análisis multivariado, donde las variables categóricas se calcularon de acuerdo a la frecuencia absoluta y frecuencia relativa mientras que las variables cuantitativas, se utilizaron medidas de tendencia central y de dispersión.

**Resultados:** El promedio de edad de la muestra fue de 10.6 años, con una distribución similar por géneros. La escolaridad obtuvo mayor porcentaje en nivel básica primaria en un 64.9%. Un 37.7% tiene diagnóstico de sobrepeso y un 62.3% obesidad. El 48.2% de la muestra registró caso probable de psicopatología y un 13.6% caso cierto según resultados de la escala breve de evaluación psiquiátrica ( $p < 0.001$ , Chi-cuadrado de Pearson). Los resultados de la aplicación de la escala de evaluación de ansiedad en niños y adolescentes, mostraron que un 56.0% de la población puntuó para trastorno de ansiedad, de los cuales un 63.0% son obesos.

**Conclusión:** Se sugiere el tamizaje psicopatológico para su detección temprana lo cual podría cambiar el curso del sobrepeso u obesidad infantil con una intervención psicoterapéutica temprana.

**Keywords:** ansiedad, obesidad, sobrepeso, psicopatología.



## RESULT OF “ADOLESCENT STRENGTHS AND DIFFICULTIES QUESTIONNAIRE, SDQ” (PARENT VERSION) IN XI’AN OF CHINA

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**Objectives:** Aim to find psychological and behavioral problems of adolescents in Xi'an by strengths and difficulties questionnaire (SDQ) (parent version) survey.

**Methods:** Adopt stratified cluster random sampling, the parents of 3592 students who came from 2 community 6 primary-middle schools in Xi’an completed SDQ. The data for gender and age differences was in comparison, and for area differences was compared to Shanghai norm. **Results:** The survey data of behavior, hyperactivity and attention cannot, peer interaction and difficulties score four factors in Xi'an shows that boys scored higher than girls ( $t=2.049\sim 5.353$ ,  $P<0.001\sim 0.05$ ); and of social behavioral factors shows that girls scored higher than boys ( $t=2.237\sim 4.582$ ,  $P<0.001\sim 0.05$ ); and of emotional factors the boys and girls tends to the average scores ( $P>0.05$ ). The data compared to Shanghai norm shows that statistically significant differences exist in behavioral, social and emotional problems factors ( $t=2.316\sim 4.653$ ,  $P<0.001\sim 0.05$ ).

**Conclusion:** Strengths and difficulties questionnaire (parent version) is suit for Xi'an adolescents to find psychological and behavioral problems. And psychological and behavioral problems of different area adolescents are with different characteristics.

**Keywords:** strengths and difficulties questionnaire (parent version); Xi'an; Shanghai norm; adolescents; psychological and behavioral problems

## **STIGMA, SELF ESTEEM AND DEPRESSION IN ADOLESCENT PATIENTS WITH EPILEPSY**

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**Objective:** This study aims to evaluate depression, perceived illness stigma of epilepsy, and self-esteem in a sample of adolescent with epilepsy (AWE); and to evaluate the association between depression and the latter two variables in AWE.

**Methods:** Adolescents (14-22 years of age) with idiopathic epilepsy (AWE) in Kasr Al Ainy outpatient epilepsy clinic were interviewed using The Structured Clinical Interview for DSM-IV Axis-I Disorders to assess presence or absence of depression (depressive disorders). 30 AWE with depression and 30 AWE without depression were recruited. The Internalized Stigma of Mental Illness scale (ISMI) was used to assess perceived illness stigma of epilepsy and the Rosenberg Self-esteem Scale was used to assess self-esteem in both cases and controls. The AWE with depression were also interviewed by Beck Depression inventory and Hamilton Rating Scale for Depression.

**Results:** Perceived (internalized) stigma of epilepsy is significantly higher (by the ISMI) and self-esteem is lower in the AWE with depression compared to the AWE without depression. 53.3% of the patients in AWE with depression group had suicidal ideation. 73.3% of the patients in AWE with depression group thought that epilepsy affected their social lives, while only 26.7% of the patients in the other group reported that epilepsy affected their social lives. The latter difference between the two groups is **statistically significant** ( $P= 0.001$ ). 63.6% of the patients in AWE with depression group reported that epilepsy affected their education and in the other group 26.7% reported that epilepsy affected their education. This difference is also **statistically significant** ( $P=0.016$ ).

**Conclusion:** Perceived illness stigma of epilepsy and self-esteem are significant predictors of depression in AWE.

## **ANOREXIA NERVOSA IN A 7 YEAR OLD GIRL**

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**Objectives:** Anorexia nervosa is rarely encountered in pre-puberal patients, and in extremely young patients it is associated with unique diagnostic and treatment challenges.

**Methods:** Case report of a 7 year old patient with Anorexia Nervosa is presented. Clinical and biological findings are reported.

**Results:** We present the case of a 7 year old patient who presented with a history of restrictive and purgative behavior, an intense fear of gaining weight and a body weight in the 10<sup>th</sup> percentile for her age. She also presented with perfectionist and reiterative behavior, but she did not fulfill criteria for Obsessive Compulsive Disorder. Her mother was a nutritionist, and the patient seemed knowledgeable of nutritional properties of food types. After evaluation, she was diagnosed with anorexia nervosa and treatment with fluoxetine was started. We found epidemiological studies reporting prevalence for restrictive behaviors of 2.6/100, 000 in patients between the ages of 5 and 12. The patient did not immediately respond to treatment and the parents withdrew her from our care.

**Conclusions:** Anorexia Nervosa is difficult to diagnose at extremely young ages, as standard diagnostic criteria are difficult to apply. Treatment options are limited, and recommendations are based in small case series. We highlight the diagnostic and therapeutic difficulties that arise in the setting of anorexia nervosa in pre-puberal ages.

**Reference:** Pinhas L et al. Incidence and age-specific presentation of restrictive eating disorders in children: a Canadian Paediatric Surveillance Program study. Arch Pediatr Adolesc Med. 2011;165:895-9.

## **ASSESSMENT OF PREVALENCE OF SUBSTANCE USE IN REFERENCE ENVIRONMENT OF ADOLESCENTS**

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**Objective:** To study prevalence of substance use in reference environment of two groups of adolescents.

**Material and methods:** Group 1 included 776 schoolchildren aged  $15,7 \pm 1,2$  years. Group 2 included 156 adolescents aged  $16,1 \pm 1,4$  years under rehabilitation in summer camp for juvenile offenders "Sibextrem". As a method, one-wave nomination method was used. Adolescents had to rate the number of occasional and systematic users of various drugs in their environment.

**Results:** Acquaintances who tried cannabis have been revealed in 49,82% of adolescents from schools and in 54,5% from the camp; with systematic cannabis users, 38,23% of schoolchildren and 53,8% of juvenile offenders were acquainted. 10,7% of schoolchildren have in their environment acquaintances who used drugs in form of injections once in life, in the camp this index constituted 23,73%. 6,7% of schoolchildren and 21,81% of adolescents from the camp contacted with people regularly using injection drugs. Prevalence of adolescents having tried inhalants in reference environment of schoolchildren constituted 33,85%, in the environment of juvenile offenders 40,39%. 23,17% of schoolchildren and 37,19% of adolescents in the camp "Sibextrem" know persons regularly using inhalants. Schools leave behind the camp only regarding prevalence of contacts with people who tried alcohol (87,39% vs. 80,78%) and who regularly uses spirits (79,03% vs. 75,65%).

**Conclusion:** Thus, findings indicate that in reference environment of juvenile offenders, greater number of substance users than in general population of schoolchildren is present.

## **POSSIBILITIES OF PROJECTIVE METHOD IN WORK WITH JUVENILE OFFENDERS**

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**Objective:** To study possibilities of projective method in revealing the psychological traits of juvenile offenders.

**Material and methods:** 155 juvenile offenders aged  $17,1 \pm 0,9$  years were exposed to experimental-psychological examination with projective technique "Draw a Person".

**Results:** Analysis of images has shown that drawings in 14,7% of cases did not correspond to the age. In 61,4% of cases, drawing was small that indicates unprotectedness and depressive background of mood. In 14,7% of cases, image was very big that testified to disturbance of control, impulsiveness, expansiveness. In 56,8% of cases the drawing was at the edge of the sheet that correlated with low self-esteem, high level of anxiety. 8% draw the person half-face - severe negativism. Excessive decorations were observed in 62,5% of drawings that corresponded to demonstrativeness. Detail and structuredness corresponded to rigidity and have been revealed in 28,4% of cases. Variants of hatching correlated with anxiety and were observed in 29,5% of works. Poor detailed representation of lines in 35,2% testified to passiveness, self-doubt. Signs of infantilism were revealed in 13,6%. Analysis of images of the person has shown that in 44,35%, the sex was not identifiable that indicates non-formation of sexual identification. Signs of his/her weakness, impossibility to influence on the course of events (in kind of unfinished images) were revealed in 15,9%. In 10,2% of works, signs of refusal to communicate were revealed. In 34,09% of works, signs of physical aggression were found, and in 14,77% of probands, signs of verbal aggression, in 63,64% - high level of suspiciousness, in 35,2% of images asocial trends were reflected.

**Conclusion:** Thus, projective method has allowed revealing psychological traits in juvenile offenders, with difficulty identifiable with other methods.

## **FIELD SURVEY OF DEPRESSIVE SYMPTOMS, MANIC SYMPTOMS AND AUTISTIC TENDENCIES AMONG ELEMENTARY, JUNIOR AND SENIOR HIGH SCHOOL STUDENTS IN JAPAN**

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**Objectives:** In the present study, a questionnaire survey was conducted to investigate depressive symptoms, manic symptoms, and autistic tendencies among elementary, junior and senior high school students in Japan.

**Methods:** A questionnaire survey comprising the Quick Inventory of Depressive Symptomatology (QIDS-J), the Manic Episode Diagnostic Screening Inventory (MEDSCI), the Japanese version of the Autism Spectrum Quotient (AQ-J) and lifestyle-related questions was conducted on 3,735 school students in Hokkaido. Correlation analysis and comparison multiple analysis were conducted on the questionnaire scores using SPSS 20.0J software.

**Results:** Overall mean score for QIDS-J was  $5.2\pm 4.3$ , with moderate and more severe depression observed in 12.4% of subjects overall compared with 3.7% for 3rd grade elementary, 3.9% for 5th grade elementary, 13.3% for 2nd grade junior high and 19.4% for 2nd grade senior high school students. MEDSCI scores revealed manic tendencies in 6.5% of subjects overall and 2.7% of 3rd grade elementary, 4.9% of 5th grade elementary, 7.4% of 2nd grade junior high and 8.3% of 2nd grade senior high school students. Overall mean score for AQ-J was  $20.4\pm 6.1$  and the proportion of subjects scoring higher than the 30-point cut off was 5.8% overall versus 3.0% of 3rd grade elementary, 3.2% of 5th grade elementary, 6.6% of 2nd grade junior high and 7.8% of 2nd grade senior high school students. Correlation analysis revealed a significant relationship between QIDS-J and both MEDSCI scores ( $r=0.41$ ,  $p<0.01$ ) and AQ-J scores ( $r=0.34$ ,  $p<0.01$ ).

**Conclusions:** A significant positive correlation was found between QIDS-J and MEDSCI scores, and between QIDS-J and AQ-J scores. The present findings suggest that high scores for depressive symptoms may be taken as indication of high scores for manic symptoms or autistic tendencies among school age children and adolescents in Japan.

## **DISTINCTIVE FEATURES OF PTSD SYMPTOMS IN CHILDREN OF DIFFERENT AGES**

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At the development of International Classification of Disorders 10<sup>th</sup> revision (ICD -10), it was considered that the effects of psychological traumas in children are not as serious as they are in adults (Rutter M., 1967; Quarantelli EL, 1985; Garnezy N. 1986). For children there has not been allocated a special diagnostic category similar to PTSD in adults (F43.1), although not everybody agreed with this (McFarlane AC, Policansky S., Irvin CP, 1987; Nader K., Pynos RS, Fairbanks L., Frederick C., 1990; Yule W., Williams R., 1990).

Our experience in working with children who have experienced psychological trauma in Beslan, showed that all affected demonstrated the following signs in one way or another (the list is not exhaustive): regressive symptoms; various forms of dyssomnias, eating disorders, motor agitation, regressive behavior, increased level of anxiety, emotional sensitization; repression of traumatic events or the need to respond them in actions, and social dysfunction (Dobryakov, 2005). Difficulties of the diagnosis of these conditions in children are associated with polymorphism and effacement of the clinical picture. Consideration of the manifestations of posttraumatic stress symptoms from the position of understanding the levels of the psychological defense system of a person may help to comprehend its specificity in children of different ages (Nikolskaya, Dobryakov, 2010). We distinguish four levels of the defense system, consistently forming in ontogenesis: somato-vegetative, psychomotor, psychological defenses and coping behaviors. In a situation of trauma, adaptation to stress in children is automatically performed on the first three levels of the defense system. The younger the age of a child, the more often symptoms of an earlier level of the defense response are observed. The fourth level of defense, coping behavior, suggests conscious efforts of a person, aiming to solve the problem or to adjust to the problem, if it cannot be solved. It is formed by adults by means of focused work with children who have experienced a traumatic situation.

Age peculiarities of processes interaction of mental structures formation with manifestations of traumatic disorder as such explain the specifics of symptoms and pathomorphism, which should be considered in the diagnosis, treatment and rehabilitation activities.

## **PROGNOSIS OF THE BEHAVIORAL AND EMOTIONAL PROBLEMS OF THE JAPANESE ADOLESCENTS: THE SECOND REPORT**

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**Objectives:** To explore how the patients' data at the initial interview are related to the treatment outcome.

**Methods:** The subjects were the patients with mental disorders at Kita-no-Maru Clinic in Tokyo aged eighteen or below at the initial interview. Sixty cases equipped with sufficient medical records who received my treatment for at least six months were chosen.

**Results:** The subjects consisted of 28 males and 32 females. Their average age at the first visit was 15.9 years old. The psychiatric diagnoses were; 23 psychological reaction or adjustment disorders, 21 schizophrenia, 19 neurosis, 11 mood disorders, 9 developmental disorders and 4 personality disorders, etc.. The problematic behaviors were; 49 school nonattendance, 17 social withdrawal, 11 self-harm, 9 suicide attempts, 9 domestic violence, 9 child abuse, 5 bully, 5 delinquent, 5 eating disorders, etc.. GHQ-28 scores at the initial interview were; somatic symptoms 3.8, anxiety/insomnia 4.5, social activity disorders 3.7, depression 4.0 and the total of 16.0. The Japanese version of YSR and CBCL showed scores of clinical range only in the internalizing scale and the total score. The adjustment levels evaluated by GAF(DSM-IV-TR) were 42.3 at the first visit, 57.3 at six months later, 58.6 at one year later, 65.8 at three years later and 66.4 at five years later, which showed betterment of adjustment status. It was the initial GAF score that affected most significantly the subsequent adjustment level.

**Conclusion:** Clinical findings at the initial interview are important to predict the treatment outcome, and their relations should be further investigated.



## **DYADIC APPROACH IN THE TREATMENT OF PSYCHOSOMATIC DISORDERS IN INFANTS**

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Prenatal existence is possible only being a part of a unique formation, consisting of two organisms with common physical and mental boundaries. However, after the birth of a child, the dyad continues to exist. Survival of the infant, his/her adaptation to the new environment and successful development depends on the persistence in the new conditions of "mother - baby" dyad, the essence of which is reflected in the term 'bonding'. Independently, outside of this dyad, without child caring, feeding, he/she cannot survive (S. Lebovici, 1983; M.S. Mahler, 1975; D.N. Stern, 1977; D.W. Winnicott, et. al 1987). Adaptation of an infant to the environment is carried out automatically by attracting attention of his/her mother and getting her support, which provides automatic changes in the activity of various bodily systems. Functional impairments arising in infants, may say what they are experiencing (Eliacheff C., 1994). D. Vasse called it "an organic language". At this age the level of neuropsychological response in children is slightly differentiated, characterized by increasing general and mental agitation and was named somato- vegetative (V.V. Kovalev, 1985, I. Nicholas, 2005). At this, children often develop psychosomatic symptoms, primarily related to the digestive system. Most typical are infant colic, aerophagia, infantile anorexia, underdevelopment of digestive system, overeating, rumination disorder, parorexia. All these disorders are summarized in ICD-10 under one category –eating disorders in infancy and childhood (F98.2), except parorexia (F98.3), anorexia (F50.) and overeating (F50.4). R.A. Spitz noted that such disorders reflect early relations failure in a mother-child dyad, representing the most archaic forerunner of objective relations disorders (R.A. Spitz, 1963). Psychotherapeutic help in such cases should be provided in the mother-child system. Treatment of disorders of a newborn baby only by neonatologist, disregarding the mother's condition and her relationship with a child, helps insufficiently. Given that early childhood is unique and extremely complex (M.P. Gean, 1994), that the differentiation between mind and body is not yet complete (Spitz RA, 1963), it should be remembered that we can influence on a small child through his mother, with whom it represents a single system. And to observe the mother's psychodynamics is much easier than of a child (R.A. Spitz, 1963). The foregoing facts lead to the conclusion that researches in the field of perinatal psychology and psychotherapy open new prospects for prevention and therapy of psychosomatic disorders both in mother and in a child.

## **PROLONGED DYSPHORIC DEPERSONALISATION SUBSEQUENT TO CANNABIS USE IN AN ADOLESCENT MALE.**

Daniela Volochniuk

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Over 16 million Americans regularly use cannabis, in most cases starting in adolescence. Cannabis use in the young population is getting increasing attention with regards to its connection to first episode psychosis and schizophrenia. While this remains an area of controversy and investigation, there is even less awareness regarding cannabis potential for inducing dissociative symptoms, alone or in conjunction with mood symptoms.

The Case:

We are presenting the case of a 17 year old male, with no prior psychiatric history, who presented with a 72 hours of dysphoric depersonalisation following cannabis abuse.

Conclusion:

Based on the review of our case and the available literature, it is proposed that cannabis abuse in young individuals with risk factors such as a family history of substance abuse and depersonalisation, concomitant psychosocial stressors and a state of anxiety increase the risk of developing dysphoric dissociative states, sometimes with concomitant panic attacks. The risk does not appear to be dose dependent.

Little is known of the neurophysiology involved and further investigations are needed to elucidate the connection between panic attacks, dissociative states and cannabis use.

## **ILLNESS PERCEPTION AS A PREDICTOR OF LIFE QUALITY IN PATIENTS WITH BETA-THALASSEMIA MAJOR OBJECTIVE:**

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The aim of the present study was to evaluate the influence of illness perception on the life quality in beta- thalassemia major patients.

### **METHODS:**

43 outpatients with beta-thalassemia major were included in the study. Patients screened by Short Form-36(SF-36) ,Hospital Anxiety and Depression Scale(HAD) and Revised Illness Perception Questionnaire(IPQ-R).

### **RESULTS:**

The results show that several illness perception factors are significant predictors of life quality. Illness coherence, personal control, treatment control were strongly correlated with quality of life. Depression was correlated with personal control and treatment control.

The perception of personal control and treatment control were associated with the SF-36 physical functioning and emotional functioning scores, Treatment control was correlated with mental health. Illness coherence was associated with social function and emotional functioning scores. The correlation between HAD and SF-36 scores was statistically significant.

### **CONCLUSION:**

Anxiety, depression and personal illness representations are significantly related to quality of life. The correlations between anxiety, depression levels, illness perceptions and SF-36 scores indicate that high anxiety and depression levels and also negative cognitive and emotional representations are associated with reduced quality of life.

## **DISRUPTIVE MOOD DYSREGULATION DISORDER (DMDD) A CONTROVERTIAL APPROACH.**

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The publication of the DSMV has continued the debate around the proposed DMDD not only about its boundaries and clinical stability, but its effect on the prevalence of mood disorders.

Proposing 4 domains (Clinical phenomenology, delimitation from other diagnoses, longitudinal stability and association with parental psychiatric disorder) the diagnostic criteria aims to be very specific, to give a more accurate approach and better treatments, but recent publications have not yet been decisive.

### **Materials and Methods:**

These diagnostic criteria raises concerns about the advantages in the clinical approach; we are trying to determine the number of children diagnosed with Attention deficit hyperactivity disorder or Oppositional defiant disorder that would meet the criteria and would have been diagnosed with DMDD in our Mental Health Care Centre during the last 6 months.

### **Results:**

We observed that only a very small proportion of children in the sample can be given the diagnosis of DMDD by DSM-V criteria.

A possible explanation for these findings could be the difficulty to do an exhaustive exploration of symptoms like chronic irritability, and to differentiate them from other conducts like anxiety, sadness or hyperactivity.

Familiarizing the clinician with this new category can help them work out a better differential diagnosis with disruptive conducts and functional deterioration, and important distinction, contemplating they could evolve to a depression or bipolar disorder.

Finally, looking into the prognosis of this children and the positive effects that an earlier diagnosis and a better treatment would have, we think that all affords are well received.

W. Copeland. Prevalence, Comorbidity and Correlates of DSM-5 Proposed DMDD. *Am J Psychiatry*. 2013 February 1; 170(2): 173–179

## **TRANSITIONING ADOLESCENTS WITH AUTISM SPECTRUM DISORDER AND DEVELOPMENTAL DISABILITIES TO ADULTHOOD**

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### **Objectives:**

1. This presentation is to help participants understand the challenges experienced by children and adolescents with autism spectrum disorder and developmental disabilities and their families at different stages of developmental.
2. Discuss the concept of self-determination and its application in promoting and optimizing personal growth and development to enhance adaptive function and self-worth.

### **Method:**

Self-determination is the right of all human beings more so of the persons with disabilities to make choices about their own lives, to speak and advocate for themselves. Oscar Wilde (1854-1900) stated that "The aim of life is self-development to realize one's nature perfectly that is what each one of us is here for". Literature survey in the last few decades showed that since 1988 self-determination as core concept has been utilized for people with disabilities.

Two clinical vignettes will be presented to highlight the use of this core concept in care of adolescents as they transition to adulthood and how they addressed various challenges associated with age and stage of development. In addition we will discuss various strategies to promote self-determination (1).

### **Results:**

Our vignettes demonstrate that in both of our adolescents utilization of self-determination concept across their life span helped them learn skills and develop attitude that enabled them to be the causal agent for positive change in their own lives like developing self dignity, self determination, self direction with the help of supportive family, positive educational and social environment.

### **References:**

1. Wehmeyer, M.L. et al. Research- Based Principles and Practices for educating students with Autism: Self-Determination and social Interaction. *Education and Training in Autism and Developmental Disabilities* 2010, 45(4)475-486

## **ARIPIPRAZOLE IN THE TREATMENT OF SYMPTOMS OF IRRITABILITY ASSOCIATED WITH AUTISTIC DISORDER**

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**Objectives:** To review the efficacy and safety of aripiprazole in the treatment of symptoms of irritability associated with autistic disorder. We also review the improvement in other symptoms of the scale Aberrant Behavior Checklist (ABC).

**Methods:** In order to do this we have reviewed three studies including two 8-week, randomized, double-blind, multicenter studies evaluating the efficacy of fixed doses of aripiprazole (5 mg / d, 10mg / d, 15mg / d) and flexible doses ( 2-15mg / d) compared with placebo. The third study was a post hoc analysis of the previous two and evaluated the effect of aripiprazole in the 58 items of the ABC. We tried to describe on which of the specific symptoms of the ABC subscales did aripiprazole act more effectively, and at what dose.

**Results:** The results were significant with aripiprazole compared with placebo ( $p < 0,05$ ) on the following items of the ABC and with any dose of aripiprazole used: rapid changes in humor, screaming, kicking, repetitive, noisy, constantly running and jumping and tends to being too active. Moreover, with the dose of 15 mg / d significant results were obtained in a greater number of items.

Discontinuation rates were similar between the groups in both studies. In the fixed-dose study, the most common reason for withdrawal in all treatment groups was side effects: Placebo  $n = 4$  (7.7%), aripiprazole 5 mg,  $n = 5$  (9.4 %); aripiprazole 10 mg,  $n = 8$  (13.6%) and 15 mg of aripiprazole,  $n = 4$  (7.4%). In the flexible-dose study, the most common reason for aripiprazole withdrawal was side effects (10.6%) and for placebo lack of efficacy (11.8%).

**Conclusions:** aripiprazole was efficacious in children and adolescents with irritability associated with autistic disorder and was generally safe and well tolerated.

## OPPOSITIONALITY AND AROUSAL: SPECIFIC ASSOCIATIONS WITH THE HEADSTRONG/HURTFUL DIMENSION

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<sup>3</sup>. Research Group on Child and Adolescence Behavior (GECIA), Porto Alegre, RS, Brazil.

**Objective:** To investigate the association between arousal and distinct oppositional dimensions in a community sample of adolescents.

**Methods:** This is a cross-sectional study encompassing teenage students from public schools. Oppositionality and its dimensions were assessed with the Youth Self Report scale<sup>1</sup> and aggressive behavior was evaluated with the Brazilian modified version of Olweus Bully/Victim Questionnaire<sup>2</sup>. Arousability was assessed through sympathetic skin response (SSR) with 10 aversive stimuli and measured the amplitude of each SSR generated<sup>3</sup>. This study was approved by Hospital de Clínicas de Porto Alegre's ethical committee (n. 120074)

**Results:** A total of 38 adolescents with mean age of 13.84 (SD=1.46) years were included. Increased SSR was linked with oppositional behavior [Pillai's Trace=0.234;  $F(2,33)=5.037$ ;  $p=0.012$ ;  $\eta_p^2 = 0.234$ ] and girls showed higher levels of oppositional behavior [Pillai's Trace=0.219;  $F(2,33)=4.637$ ;  $p=0.017$ ;  $\eta_p^2 = .219$ ]. However, this correlation is specific to headstrong/ hurtful dimensions [ $F(1,34)=7.802$ ;  $p=0.009$ ;  $\eta_p^2 = 0.187$ ]. The exploratory analyses showed that increased SSR is associated with several types of headstrong/hurtful behaviors related to bullying [Pillai's Trace=0.487;  $F(3,29)=9.189$ ;  $p<0.001$ ;  $\eta_p^2=0.487$ ] and only the first aversive stimulus was responsible for the difference between adolescents with high and low oppositional behavior scores [ $F(9,197)=2.548$ ;  $p=0.008$ ].

**Conclusions:** This study provides insights about how dysfunctions in autonomic balance may contribute to the emergence of oppositional behavior among adolescents.

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<sup>2</sup> Achenbach, T. M., & Dumenci, L. (2001). Advances in empirically based assessment: Revised cross-informant syndromes and new DSM-oriented scales for the CBCL, YSR, and TRF: Comment on Lengua, Sadowksi, Friedrich, and Fisher. *Journal of Consulting and Clinical Psychology*, 69(4), 699-702.

<sup>3</sup> Schestatsky P., et al. (2009). Sympathetic skin responses evoked by muscle contraction. *Neuroscience Letters*, 463(2):140-4.

## **RISK OF SUICIDE AMONG YOUNG PATIENTS WITH PSYCHOTIC EXPERIENCES IN A MENTAL HEALTH CLINIC**

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### **Objectives**

Recent community-based studies have suggested that psychotic experiences are widely prevalent in youth, and could be a risk factor for suicidal behaviors. However, there are a few clinical studies focused on this issue. In the present research using the data of self-reported questionnaire, we studied the prevalence of patients with psychotic experiences and also the risk of suicide in clinical settings.

### **Method**

We conducted a cross-sectional study of 814 patients (aged 10-15 years) who were referred for the first time to two child and adolescent mental health clinics. Patients without any definite diagnosis or with mental retardation were excluded. A total of 564 patients were enrolled to study the risk of suicidal ideation and attempt in association with 4 kinds of psychopathologies, including depressive status (PHQ $\geq$ 3), auditory hallucination (AH), social withdrawal and violent behaviors. We also conducted stratified analysis in terms of voluntary willingness to consult a psychiatrist.

### **Result**

The prevalence of patients who reported AH was 13.3%. Among the psychopathologies, only depressive status (PHQ $\geq$ 3) was significantly associated with simple suicidal ideation (those with suicidal ideation and without suicidal attempt) [odds ratio (OR) 3.4, 95% confidence interval (95% CI) 2.1-5.3]. Whereas, only AH was significantly associated with suicidal attempt [OR 5.3, 95% CI 2.9-9.9]. Stratified analysis showed that AH was associated with suicidal attempt at higher odds in patients without willingness to consult [OR 7.6, 95%CI 2.4-23.9] than those with the willingness [OR 4.4, 95%CI 2.1-9.4].

### **Conclusion**

Young patients who report psychotic experiences are as common in our mental health clinics as in the general population. AH may be associated significantly with suicide attempt in young patients especially among those without willingness to consult. It is important that young patients with AH should be watched with increased vigilance, in particular, those with AH visiting a clinic unwillingly.



## NEUROPSYCHOLOGICAL DIFFERENCES IN AUTISTIC SPECTRUM DISORDER

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**Objective:** To describe and compare, to an extent, clinical and neuropsychological differences in children with Autistic Spectrum Disorder (ASD).

**Method:** Children with Autistic Spectrum Disorder were divided in four groups according to a clinical presentation. They were evaluated making use of the following tests: Autism Diagnostic Interview Revised (ADI-R), Autism Diagnostic Observational Schedule (ADOS), Wechsler Intelligence Scale for Children (WISC-IV) or Wechsler Preschool and Primary Scale of Intelligence Third Edition (WPPSI-III) and the Wisconsin Card Sorting Test.

**Results:** Twenty nine ASD were divided in four groups: 7 Autism, 10 Asperger's syndrome, 8 pervasive developmental disorder not otherwise specified (PDD-NOS) and 4 Schizoid Personality in Childhood.

The Full Scale Intelligence Quotient was higher in Asperger's than in Autism.

In ADOS:

- communication domain and reciprocal social interaction domain had a higher score in Autism than in the other three groups ( $p=0.030$  and  $p=0.010$ , respectively).
- stereotyped behaviors and restricted interests domain obtained the highest score in Autism and the lowest score was for Schizoid Personality in Childhood ( $p=0.3$ )
- creativity score was higher in Autism than in Asperger's and in PDD-NOS ( $p=0.029$ ).  
Regarding the Wisconsin Card Sorting Test, the Autism group showed the highest perseverative errors ( $p=0.024$ ).

**Conclusion:** This study found some neuropsychological differences in ASD, especially in creativity and cognitive rigidity. Future research should attempt to evaluate phenotypic cluster based on similarity of symptoms and correlate them with different neuropsychological measures.

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## ATTACHMENT THEORY: CLINICAL DESCRIPTION OF A CASE

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**Keywords:** Attachment, tie, disorganized.

**Introduction:** Attachment theory explains the need of human beings to build an emotional tie with people, as described by Bowlby and Ainsworth. They studied the ties between infants and their carers in their childhood. The attachments were classified in secure and insecure, and the latter in avoidant (rejecting behaviours), resistant (uncertain-ambivalent behaviours) and disorganized.

The mind theory explains the ability of expressing thought and intentions to one-self and others. An insecure attachment is more likely to create a psychopathology.

**Clinical report:** A 9-year-old Ukrainian boy, adopted at 15 months (previous life unknown). He presented indiscriminate sociability (physical contact-seeking, intrusive personal question), lack of attachment behaviour toward his Foster parents, psychomotor anxiety, defiant attitude, lack of control, sensory stereotypes and restrictive interests. He fails to understand the others' needs.

Diagnosis: attention deficit hyperactivity disorder (F90) and reactive attachment disorder, disinhibited type (F94.2)

**Results:** The psychological interview and his biography suggest an insecure attachment and a disorganized type. The child presents some risk factors such as early separation of his carers, poor parenteral care, inadequate family environment and psychiatry comorbidity.

**Discussion:** The secure attachment can give children a secure basis in order to explore their own operative models and help to develop reflexive skills. It is more difficult to develop a good reflexive function with an insecure attachment. The lack of secure exploration of their environment produces less interaction between his own mind and other minds.

In children it is important to explore the type of attachment, as it can guide you to understand the child and his pathology.

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- The origin of the attachment theory: John Bowlby and Mary Ainsworth. I. Bretherton. *Developmental psychology* (1992), 28, 759-775.

## **STUDY OF SUICIDAL BEHAVIOR IN VISUALLY IMPAIRED ADOLESCENTS**

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According to modern research, children and adolescents with disabilities are also at risk for suicidal behavior, which should be defined and identified with a screening test (Merrick J, Merrick E, et al., in 2006; Ludi E, Ballard ED, Greenbaum R et al., 2012).

**Objectives:** To survey visually impaired adolescents studying at special (correctional) boarding schools with identification of risk groups for suicide.

Material of research: 64 pupils aged 12-17 years.

**Methods:** Clinical examination, a specially developed questionnaire to identify suicide risk.

**Results:** The suicidal thoughts were observed in 39% of pupils. 67% of pupils were staying in a depressed mood. The question "have you ever felt any desire to die?" was replied affirmatively by 54% of respondents. The question "ever tried, even in jest, to kill you?" was replied affirmatively by 3% of pupils. Children with sight disorder often experience negative emotions caused by awareness of their defect that might be a cause of decrease of mood, suicidal thoughts.

**Conclusions:** Presence of suicidal thoughts, a lower mood characterizes adolescents with disabilities, as well as «normal» children. Thus, children from correction schools need work on formation of skills of psychological resistance and social competence. Obtained data is conditioning the necessity of preventive activity on revealing and preventing the suicides in children and conducting timely correction. The lack of preparedness of teachers to manifestations of suicidal activity in pupils requires the organization of educational and information programmes, trainings, workshops.

## **THE INFLUENCE OF BODY IMAGE IN REFERENTIAL THINKING AT YOUNG**

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### **Objectives**

Adolescence is a stage with high-impact physical changes. The internalization of body image, and personality characteristics, facilitate the development of a negative body image. The high egocentrism of adolescence itself facilitates the focus on appearance and therefore the referential thinking. This puts the teen in a position of vulnerability to psychopathology.

We propose to analyze the relationship of body image disturbances in referential thinking. We assess the main indicators of psychopathology of body image in young and to identify based on variables obtained, the risk of suffering psychopathology.

### **Methods**

Participants: 899 subjects students (37.9% male) aged 14 to 21 years, from the general population (high school and university). This research followed an ex post facto and cross-sectional design. All analysis were accepted at  $p < .05$ .

### **Results**

The results showed that the youngest are those who show a greater concern with their body image, presenting a higher referential thinking,  $F(2, 896) = 3.61, p < .05$ .

The main indicators of psychopathology of body image related with the referential thinking were the concern for body image ( $\text{Eta}^2 = .033$ ) and the alteration behavioral related with body image ( $\text{Eta}^2 = .028$ ).

### **Conclusions**

Subjects who had high or low dissatisfaction with their body image, along with the subjects with high concern about their body image, and with a high number of behavioral alterations related with body image, had high scores on referential thinking, finding them in serious psychopathological risk (7% of the sample).

## **TREATMENT ENGAGEMENT AND COMPLETION WITH TRAUMATIZED CHILDREN AND YOUTH: AN EMPIRICAL INVESTIGATION**

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**Objectives:** Despite advances in effective trauma-informed treatments, there is much to learn about how to improve treatment engagement and completion rates particularly among children and adolescents diagnosed with Posttraumatic Stress Disorder (PTSD). Estimates suggest between 25-60% of children seeking mental health services terminate treatment prematurely (Cohen & Mannarino, 2000; McKay, Lynn & Bannon, 2005). This presentation will utilize data collected from the National Child Traumatic Stress Network (NCTSN), a federally funded child mental health service initiative designed to raise the standard of care for traumatized children and their families.

**Methods:** This study involves secondary analysis of the NCTSN Core Data Set (CDS), and includes data on 2759 traumatized youth. The CDS consists of comprehensive information on trauma history, demographics, treatment, services, functional impairments, and psychosocial outcomes assessed via standardized measures of PTSD (i.e. Trauma Symptom Checklist for Children, Trauma Symptom Checklist for Young Children, Child Behavioral Checklist).

**Results:** A sequential logistic regression analysis was performed using SPSS 18.0 to assess prediction of the probability of a given subject having prematurely dropped out of treatment. The model was first fit using the five demographic variables, followed by the addition of six trauma exposure variables on the second step and the six diagnostic variables on the third step. End of treatment status was predictable from ethnicity, race, guardian status, and several comorbid conditions. Notably, African-American children were 85.4% more likely to drop out of treatment than their Caucasian counterparts.

**Conclusions:** The capacity of any evidence-based approach to include or integrate dropout prevention strategies may ultimately speak to its feasibility and utility in real-world treatment settings. To this end, strategies to improve treatment completion by the vulnerable subgroups identified in this study are proposed.

## **PERVASIVE REFUSAL SYNDROME: A CASE REPORT AND REVIEW OF THE LITERATURE**

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### **Objectives:**

Pervasive refusal syndrome is a rare disorder characterized by determined refusal to talk, walk, eat, drink, or self-care. Despite the increasing number of cases reported, it fails to fit into the current diagnostic classification of psychiatric disorders.

The aim of the present study is to describe a case report of a patient who presented with pervasive refusal syndrome and to provide a review of literature.

### **Methods:**

Previous reports of pervasive refusal syndrome are reviewed along with a case presentation.

### **Result:**

A large number of cases have been reported of patients presenting with pervasive refusal syndrome. Female predominance with onset in late childhood or adolescence has been noted. Most patients recover fully, although long-term care is required.

Case report: A 16 year-old Japanese girl who presented with refusal to eat or drink was referred to our institute for inpatient care. No organic cause could be traced by magnetic resonance imaging head scans or electroencephalography. Long-term tube feeding was required due to persistent refusal to eat. During the first month of hospitalization, she stayed in bed all day, did not eat or drink, refused to talk or write, and was doubly incontinent. She gradually started eating, walking, reading, writing, and using the toilet by herself, but her condition waxed and waned. The daily life functioning has improved slightly after 10 months of inpatient care.

### **Conclusion:**

Previous studies suggest that the prognosis of pervasive refusal syndrome is favorable in the majority of children. The present case report showed that fluctuation of symptom severity may be observed in patients with this syndrome. Further studies are required for understanding the etiology, clinical course, and management of this syndrome.

## **ON THE PROBLEM OF PSYCHOTHERAPEUTIC SUPPORT OF FAMILIES RAISING CHILDREN WITH EARLY SIGNS OF AUTISM SPECTRUM DISORDERS**

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**Background and Aims.** Diagnosis of mental disorders and timely social and emotional habilitation of children at an early age with developing clinical signs of autism spectrum disorders require improvement to reduce the severity of emotional and sociocognitive disturbances at all stages of growing-up.

**Materials and Methods.** We examined 229 child- parent dyads in which children, aged 3 months to 3 years, in 48.9 % of cases showed affective disorders such as apathy, the absence or lack of differentiation in emotional response to stimuli, stereotyped behavior, and unusual sensory perception .

**Results.** 3 blocks of intervention were provided for psychotherapeutic support: directed on mother, child and their interactions. Within behavior modeling, psychodynamic and behavioral therapy the authors achieved an increase in maternal sensitivity to understanding the child's signals and ability to initiate contact. Sensory integration with an increased ability to the child's response as regards external stimuli, expanding its emotional capabilities and the subsequent formation of resources to maintain and initiate the contact with his mother, produced formation of positive affective and socio- developmental environment for the interaction. Positive effect concerning psychopathologic manifestations in children, quality of the child-mother interaction has been obtained in 88 % - 92 % of the cases.

**Conclusion:** The results obtained testify to the necessity of early diagnosing mental disorders at an early childhood and an adequate psychotherapeutic support in a family context.

## **THE EXPERIENCE OF USING DIAGNOSTIC CLASSIFICATION OF MENTAL HEALTH AND DEVELOPMENTAL DISORDERS OF INFANCY AND EARLY CHILDHOOD, ZERO TO THREE**

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**Background and Aims.** The work was aimed at improving and unification of mental disturbances diagnosis at early childhood.

**Materials and Methods.** With the use of participant observation and Clinical Global Impression (CGI), perinatal anamnesis some peculiarities of sensomotor functions, cognitive activity, emotional response have been studied in 97 children at the age of 3 to 18 months with perinatal hypoxic-ischemic brain damage.

**Results.** On the axis I of the main diagnosis (regulatory disorders) there were registered disturbances of physiologic functional regulation: sleep-wake cycles and eating behavior disorders; sensomotor disorders; emotionally labile, anxious-aphathetic, and emotionally nondifferentiated clinical variants of affective disorders with behavioral disturbances according to a hypersensitive type (subtype of children with desorganized motocity and impulsive children), alow-responsive type (subtype of reserved children and children with reduced involvement).

On the axis II there were revealed disorders of child-mother attachment and maternal emotional deviations: despondency, anxiety, depressiveness, senses of guilt and offense.

On the axis III (neurologic and somatic diseases) some syndromes of vegetative dysfunction, an increased nervous-reflectory excitability, static and kinetic disturbances.

On the axis IV (character of psychosocial stressor) unreliable variants of attachment and noncongruent maternal behavior.

On the axis V there was established an insufficient functional level of emotional development.

**Conclusion:** The results obtained testify to the necessity of taking into consideration multicomponent formation of deviations in mental health of children at early age.



## **AFFECTIVE SYMPTOMATOLOGY AND ALCOHOL CONSUMPTION**

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**Objetives:** Alcohol consumption in adolescents is considered as a public health problem. Up to 35,6% adolescents (14-18 year-old )went already drunk. At the conclusion of this presentation, the participants will have an updating associated to alcohol consumption in teenagers.

**Purpose:** It consists on analyzing the alcohol consumption distribution in an adolescent sample and search for the possible relation between this alcoholic consume and the presence of depressive symptomatology.

**Methods:** A sample which consists in 232 subjects which was gathered in three schools, from 12 until 17 years old, 55,2% of them were males and 44,8% were females. The pupils completed a form about the drug consumption pattern and the Beck's depression inventory (IDB).

**Results:** 48,7% from the total sample affirmed they had never consumed alcohol in contrast to 50,9% that they had consumed ahead of time. 24,2% related that their consume was based on one or two alcohol drinks and 13,8% between three and four. 20,3% had been truly drunk once or twice and 22,4% had suffered from hangover once or twice. From the total sample, 42,2% related that they sometimes see that their relatives are under alcohol effects. The average punctuation in IDB was 6,45 points remaining below the cut-off point in both groups, even though we find differences between both groups statistically significant.

**Conclusions:** Alcohol consumption presents a high prevalence in adolescent population which could be related to the presence of isolated affective symptoms which could provide us the possibility of early detection in cases which have the risk of start to consume.

### **References:**

1. Observatorio Español sobre Drogas. Informe 2009. Madrid: Ministerio de Sanidad y Política Social; 2009.
2. Guxens M, Nebot M, Ariza C. Age and sex differences in factors associated with the onset of cannabis use: a cohort study. *Drug Alcohol Depend.* 2007;88:234-43.

## **TOBACO AND ADOLESCENTS**

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### **Objectives**

The consumption of psychoactive substances in teenagers is increasing every year. At the conclusion of this presentation, participants will have the updated information on tobacco consumption in teenagers.

The goal of this work is to analyze the distribution pattern of the consumption of substances and the differences existing between men and women.

### **Methods**

A sample of 232 individuals picked in three school centers, between 12 and 17 years old, being 55,2% male and 44,8% female, who completed a questionnaire about the pattern of substances consumption.

### **Results**

The 41,4% have smoked in some occasions, from males the 39,8% and from females the 43,3%; The age of starting in tobacco consumption was lower in women, being the average of smoked cigarettes higher in males. Smoker parents have been found more frequently among girls, not being this results statistically worthy.

### **Conclusions**

The consumption of tobacco in girl teenagers of our sample, starts sooner, and they smoke with higher frequency than boys, which agrees with the patterns established in the last few years.

### **Reference**

Bibliography: M. Yáñez, R. López y otros. "Consumo de tabaco en adolescentes. Estudio poblacional sobre las influencias parentales y escolares". Artículo publicado en *Arch Bronconeumol*, nº 42.

## ADOLESCENTS AND DEPRESSION

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**Objetives:** Depression is one of the most common mental disorders. It is estimated to affect 3.4-5% of adolescents in Spain. Ignorance on it and the lack of open communication about this difficult topic baulks help searching in young people. The objective of this work consists on assessing the correlation between the subjective feeling of having difficulty in areas of emotion, concentration, behaviour and relationships with others within concomitant presence of depressive or anxious symptoms.

**Methods:** A sample of 232 subjects was collected in three schools, between 12 and 17 year-old. Students completed a questionnaire on demographics, the Beck Depression Inventory (BDI) and an item on capacity for introspection divided into four subcategories: if they have little difficulties (27%), clear difficulties (6.9%), serious difficulties (2.6%) or no difficulty (66.8%).

**Results:** Of the total sample, the mean score on the BDI scale was 6.45, with + / - 5.22 standard deviation. In the Zung scale the average is 34.59, with a standard deviation of 7.43. There is positive correlation between BDI scores and Zung. In ANOVA, between introspection item and total scores BDI and Zung the means are not equal.

**Conclusions:** Although the scale scores do not reach a breakpoint, it is observed a trend in which a greater subjective sense of difficulty, higher scores on objective scales.

### References:

1. Guía de práctica clínica sobre la Depresión Mayor en la infancia y en la adolescencia. [www.guiasalud.es](http://www.guiasalud.es)
2. Guxens M, Nebot M, Ariza C. Age and sex differences in factors associated with the onset of cannabis use: a cohort study. *Drug Alcohol Depend.* 2007;88:234-43.

## **PSYCHIATRIC COMORBIDITY ASSOCIATED WITH GENDER IDENTITY DISORDER IN CHILDHOOD AND ADOLESCENCE**

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### **Objective:**

Analyze the psychopathologic comorbidity and symptoms associated with GID (Gender Identity Disorder) in a sample of patients less than 18 years of age that attended to a specialized GID Unit between 2007 and 2014.

### **Method:**

*Participants:* 20 patients under the age of 18 years diagnosed with GID.

*Materials and procedures:* Give that the protocol doesn't allow the application of evaluation/diagnosis tests to patients under 18 years of age, data was obtained from the Medical History.

### **Results:**

64% of the sample presented comorbid psychopathology (anxious and depressive symptoms, suicidal attempts, social withdrawal, absenteeism and school failure, and impulsivity).

Adolescents showed more comorbidity (80%) compared with children less than 11 years of age (none of them presented any type of comorbidity previously described).

Female-to-male (FTM) transsexual persons presented a mayor number of symptoms than male-to-female (MTF) transsexuals (83% vs. 50%).

### **Conclusions:**

The obtained results suggest that if there is an early therapeutic approach in patients under the age of 18 with GID, the comorbidity impact is reduced in the following years. It looks like GID in minor patients does not lead to mayor psychological alteration, therefore an early detection and intervention is fundamental.

## **MENTAL HEALTH REHABILITATION FOR YOUNG PEOPLE STUDYING IN VOCATIONAL SCHOOLS - PERCEIVED IMPACT OF OPI GROUP REHABILITATION PROGRAM**

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**Objectives:** The OPI mental health rehabilitation program funded by the Social Insurance Institute in Finland (Kela) aims at developing a new form of outpatient group rehabilitation for adolescents and young adults aged 16–25 years studying in vocational schools and diagnosed with mood or anxiety disorders. The evaluation study aimed at investigating the feasibility and perceived impact of the program on participants' learning and functional capacities, quality of life and severity of depression.

**Methods:** The study included 8 rehabilitation courses lasting 18 months during 2011-2013, each for maximum of 12 participants (n=70). The data were collected using questionnaires at three different points of time (baseline, after 12 months and after 18 months) and with focus group interviews (8 groups, n=47). Quality of life was measured with Eurohis-8 scale, severity of depression with RBDI scale and learning capacities with a series of questions.

**Results:** Quality of life (p=.001) and leaning capacities (p<.001) were increased and severity of depression (p=.001) was reduced among participants during the follow-up. Peer support was experienced to be the most remarkable benefit of the program among participants.

**Conclusions:** The OPI mental health rehabilitation program represents a unique model that can be used in preventing the marginalization of young people with mental health problems. It represents an innovative approach of co-operation between mental health services and school system in Finland. The results and experiences of this group-based program and its perceived impact are promising. Peer support plays an important role in recovery of young people with psychiatric disorders.

## GRIN2B MEDIATES SUSCEPTIBILITY TO AFFECTIVE PROBLEMS IN CHILDREN AND ADOLESCENTS

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**Objectives:** Association studies have implicated the N-methyl-D-aspartate receptor 2B subunit gene (GRIN2B) as candidate for different brain illnesses, also including both internalizing and externalizing disorders. Here, we explored the association between selected SNPs of GRIN2B (rs5796555-/A; rs1012586C/G; rs2268119A/T; rs2216128A/G; rs11609779C/T; rs2192973G/A) and CBCL DSM-Oriented Scales (Achenbach & Rescorla, 2001).

**Methods:** We performed a family-based association study to determine whether the GRIN2B gene influence the CBCL DSM-Oriented Scales, in a large cohort of 266 Italian nuclear families selected from an ongoing comprehensive project on child and adolescent psychopathology. Genetic association was investigated by the quantitative transmission disequilibrium test (QTDT, version 2.5.1; Abecasis et al., 2000). Quantitative traits were analyzed using the '-wega' and the '-ao' options. Empirical p-values were computed from 10.000 Monte-Carlo permutations, and the significance levels were adjusted by the false discovery rate method (Storey 2002) applied to the tests performed for each marker (i.e., 8 phenotypes).

**Results:** Evidence for significant association was found between the 'A' allele of the GRIN2B-rs2268119A/T marker and 'AFFECTIVE PROBLEMS' ( $\chi^2= 7.69$ ;  $df= 379$ ; nominal p-value= 0.006; empirical p-value= 0.006; q-value = 0.016; 207 informative families; genetic effect = 2.818).

**Conclusions:** These results provide preliminary evidence of an association between the GRIN2B-rs2268119A/T polymorphism and affective problems within the Italian population, suggesting that the 'A' allele constitutes a potential risk factor for depression in adolescence.

## **AT THE AGE OF FIVE YEARS, INTERNALIZING, EXTERNALIZING PROBLEMS AND HYPERACTIVITY PREDICT PEER PROBLEMS, POOR SLEEP AND TOBACCO CONSUMPTION AT THE AGE OF 15 YEARS**

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**Objectives:** Little is known about the predictive value of psychological issues such as internalizing and externalizing problems and hyperactivity at the age of kindergarten (5 years) for further psychological issues at the age of 15 years. The aim of the present study was therefore to reassess 15 years old adolescents longitudinally after 10 years.

**Methods:** A total of 84 15 years old adolescents took part on the study. Participants completed a series of questionnaires related to sleep, peer relationship and substance use. At the age of five years, participants' parents completed the Strength and Difficulties Questionnaire.

**Results:** Correlational computations revealed that higher scores of internalizing, externalizing issues and hyperactivity at the age of five predicted more peer difficulties, increased internalizing issues, poor sleep and an increased tobacco consumption at the age of 15 years.

**Conclusions:** The pattern of results suggests that psychological issues at the age of five years may remain stable over time and cross into adolescence. Accordingly, poor psychological functioning at the age of five years predicts increased psychological, social and sleep-related issues during adolescence.

## **OBSESSIVE-COMPULSIVE AND PSYCHOTIC SYMPTOMS: A CASE REPORT**

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### **Objectives**

We present the case of an adolescent with obsessive-compulsive and psychotic symptoms as an example of the complexity of diagnosing such patients. Conclusions are based on a review of the existing literature.

### **Methods**

The patient is a 12-year-old female, presenting to the E.R with “fear of being spied on through her computer”. She had a previous psychiatric history of obsessive-compulsive symptoms. In the last two years she had presented fear at night with difficulty sleeping and obsessive repetitive behaviors. After the first visit to the E.R the psychotic symptoms got worse, regardless of the treatment choice. She was hospitalized and improved remarkably fast. Five months after discharge compulsive and psychotic symptoms reappeared and her functioning declined. She stopped attending school because she was terrified to use computers. After being hospitalized again anxiety levels rapidly decreased and symptoms got better within weeks.

### **Results**

There is a clear association between obsessive-compulsive symptoms and psychotic symptoms, which often makes it hard to differentiate obsessive ideas from delusional ideas. Further complicating the differential diagnosis there are cases of OCD that present with psychotic symptoms. We believe that our case is an example of such presentation.

### **Conclusions.**

Obsessive compulsive disorder is a highly heterogeneous disorder. Sometimes, OCD can appear with psychotic symptoms, with periods of loss of insight or the appearance of paranoid ideas. So far, studies support the hypothesis that patients with coexistence of symptoms are different from those with a pure diagnosis, in clinical aspects, treatment response and prognosis.

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## CORRELATES OF PTSD IN TEENAGERS VICTIMS OF SEXUAL ABUSE

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**Objectives:** Reviews of the scholarly literature conclude that childhood sexual abuse is a non-specific risk factor for a spectrum of psychological disorders, including post-traumatic stress disorder (PTSD). Despite the proliferation of studies on this subject over the past years, little is known about victims' trajectories once they enter adolescence. This analysis explored the contribution of personal (resilience), familial (maternal and paternal support, sibling support) and extra-familial (peer support) to the prediction of PTSD in sexually abused teenagers.

**Methods:** Data for this study are drawn from a representative sample of youth ( $N = 8\,194$ ) through a one-stage stratified cluster sampling of 34 high schools from Quebec (Canada). Self-reported measures on sexual abuse, PTSD symptoms, resilience capacity and indicators of social support were administered.

**Results:** A total of 15.2% of girls and 4.4% of boys reported a history of child sexual abuse. Girls (27.8%) were more likely to report symptoms of intrusion, avoidance of stimuli related to the trauma and hyperarousal than boys (14.9%). A logistic hierarchical regression revealed that lower resilience capacity, lower maternal and peer support contributed to the prediction of PTSD. Reporting more than one situation of sexual abuse was associated with a 3-fold increase in the risk for PTSD, highlighting the cumulative effect of experiencing multiple sexual traumas.

**Conclusion:** The focus on abuse-related variables may not be sufficient to orient services for vulnerable youth. A detailed evaluation of PTSD symptoms, as well as personal, familial and extra-familial resources is required to disentangle the diversity of outcomes. Results attest to the importance of designing efficient intervention for teenagers but also to offer assistance to members of the family (for instance, non-offending parents) and to the social network (peers) in order to optimize the support they are willing to give to teenagers and in turn sustain their recovery process.

## PHYSICAL HEALTH CHECKS IN CHILDREN ADMITTED TO SPECIALIST IN- PATIENT MENTAL HEALTH UNIT.

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**Objectives:** Improving the provision of physical health checks for children with severe mental illness provides an opportunity to make a major difference to the health and wellbeing of this vulnerable group<sup>1</sup>. The main objective of the study was to evaluate the practice of identifying the physical health needs of children admitted to a Tier 4 Specialist mental health unit.

**Methods:** A retrospective study of all 21 children admitted to DJU between January 2013 and January 2014 was conducted. Physical health checks carried out on these subjects was measured against the standards drawn from the Cardiff Health Check (M Kerr, RG Jones, M Hoghton *et al*).<sup>2</sup> This included health promotion, chronic illness, epilepsy, behavioural disturbances, examination of systems, intellectual disabilities and medication reviews. Information was obtained from review of case notes, Professionals and carers.

**Results:** Data was analysed using Microsoft Excel Spread sheet. Physical measures such as height, weight and blood pressure were recorded in all children but BMI was recorded only in 76% of subjects. Information about chronic illness, behavioural disturbances, intellectual disabilities and medication reviews were recorded in all the case notes. Although examination of systems was recorded for all the subjects it did not include hearing and vision. Information about immunisation record and epilepsy was recorded only in 14% and 23% of subjects retrospectively.

**Conclusions:** Physical health check is an essential component of management of children admitted to Specialist Mental health units and is often overlooked. A standard checklist to identify physical health needs of such children may be helpful in achieving good outcome<sup>3</sup>.

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## **PREDICTORS OF BEHAVIORAL AND EMOTIONAL FUNCTIONING AMONG YOUNG LATINO CHILDREN LIVING IN LOW-INCOME URBAN AREAS**

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**Objectives:** This study examined the behavioral and emotional functioning among young Latino children enrolled in prekindergarten and in kindergarten schools in a large urban school district in New York City and its relation with maternal cultural adaptation and parenting styles.

**Methods:** Participants were 4 – 5 year old children (N=674) and their families and teachers. Teachers and mothers reported on children's externalizing, internalizing and adaptive behavior at school and in the home. Mothers also completed a measure of cultural adaptation (i.e., acculturation and enculturation), which was used to categorize them as bicultural or separated. Parenting style (i.e., authoritative and authoritarian) was also reported by mothers.

**Results:** Most young Latino children appear to be functioning well at this age, though boys are at higher risk for externalizing problems than girls, and girls have better adaptive behaviour than boys, according to parent and teacher reports. Being a bicultural mother was significantly correlated to have an authoritative style ( $r_s = .15^{**}$ ), and both variables were related to child functioning in different ways. To analyze this association, we conducted hierarchical regression analyses separately for each of the child functioning outcomes: externalizing, internalizing and adaptive behavior. We found that authoritarian parenting was related with more externalizing and internalizing problems and fewer adaptive skills as reported by parents and teachers. In addition, authoritative parenting was related with more adaptive skills in the home. Biculturalism was associated with better adaptive behavior but also with more externalizing problems at home and school. Moreover, it was also related to more internalizing problems but just in school.

**Conclusions:** Parenting style and mother's cultural adaptation strategy seem to be good predictors of child functioning and may be important protective factors that may mitigate the negative effects of socioeconomic disadvantage experienced by many young Latino children.

## **STRIKE THE RIGHT BALANCE WHILE PRESCRIBING PSYCHOTROPICS TO CHILDREN IN DEVELOPING ECONOMIES**

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Inadequate trained personnel remains the fore concern for developing economies. So managing the work load with constraint of resources makes the work difficult. Clinical work-up has to be brief. Therapeutic sessions may have to be cut down to counselling. Medication may become important part of treatment. Judicious prescribing and never, ever, over-prescribing should be the mantra.

Adequate investigation may not be feasible due to financial constraints but important ones cannot be omitted and safety concerns may never be downplayed. So taking hints from clinical presentation regarding adverse effects may be more important in the context of developing economies.

With limited trained child psychiatrists, training other general psychiatrists and even pediatricians and family physicians may be more important than in developed economies. Sensitisation about diagnostic clarity, proper drug selection, some minimal counselling and psycho-education skills and identifying adverse effects are the minimum targets that we need to foray into. Copying western models may not work across the countries and cultures. Chances of being biased in diagnosis and treatment in favour of multinational pharmaceuticals may be a serious trap. Culture specific models need to be worked up.

Research even though may seem a luxury in developing economies, there is a definite role of it for having country specific, culture specific and need based models of delivery. Copying western models blindly may neither serve the purpose nor address the problem adequately.

## Factors associated to the behavior of bullying in adolescents

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**Objective:** To verify the association between bullying behavior in adolescents and sociodemographic characteristics and social skills.

**Methods:** Sociodemographic data was collected from students at a public school in Porto Alegre (RS), with ages ranging from 12 to 17 years old. The Olweus Bullying Questionnaire<sup>1</sup> was used, along with the Inventory of Social Skills for Adolescents (IHSA)<sup>2</sup>. The study was approved by Hospital de Clínicas de Porto Alegre's Board of Ethics and Research (CAAE 06602412.8.0000.5327).

**Results:** A total of 223 students was included, with an average age of 13.4 (DP=1.16) years old, 101 (45%) were boys, 108 (48%) were white, with 115 (52%) others (black, mixed race and indigenous people). The prevalence of bullying was indexed at 34 (15.2%). It was noted that there is a higher chance of involvement in bullying in the event of being part of black or mixed race ethnic groups [OR= 2.5 (IC 95% 1.148-5.650); p =0.031] and having repeated the year [OR= 2.8 (IC 95% 1.24-6.36); p =0.0199].

Among the social skills, significant association was found between a difficulty to maintain self-control and involvement with bullying [uninvolved=11.7 (DP=6.97) versus involved=16.7 (DP=8.06), p<0.001]. Other social skills did not present significant association.

**Conclusions:** The results suggest a link between ethnic characteristics, school performance and a difficulty in self-control with involvement with bullying.

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## WHOLE EXOME SEQUENCING OF AUTISM SPECTRUM DISORDER IN KOREAN POPULATION

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**Objectives:** The objective of this pilot study is examining genetic variants of autism spectrum disorder(ASD) using whole exome sequencing(WES) in family samples and developing analytic pipeline for further studies with larger samples.

**Methods:** We ascertained 13 families with ASD, composed of probands, biological parents and unaffected siblings, from pooled database of Korean Autism Study Consortium. We selected severe, typical probands for attaining homogeneity of the phenotype with criteria of; meeting full criteria of autistic disorder of DSM-IV-TR; 48~156 months of age; nonverbal-phrase speech level of language, and scores of lifetime algorithms of Autism Diagnostic Interview-Revised and Social Responsiveness Scale are within 10 percentile of the database. We performed WES, minimum 50X on target. At least 94% of target area was covered more than 5 sequence reads. To find *de novo* mutation candidates, we performed additional high-coverage WES on two pooled samples from mothers(250 million paired-end reads) and fathers(236 million paired-end reads). All the sequence reads were mapped onto the human reference genome(hg19 without Y chromosome). Variant discovery had been done by BWA, Picard, GATK, and in-house custom annotation pipeline. We selected *de novo* mutation candidates(nonsynonymous, splice site, and coding indel mutation) from probands, which are not detected in two pooled samples and not reported in dbSNP137 and in-house Korean databases.

**Results:** We selected 29 *de novo* mutation candidates from 21 genes; *ABCF3*, *ADRB1*, *AKNA*, *AKT1S1*, *CELSR3*, *CHKA*, *FOXK2*, *IFI27L2*, *ITFG3*, *KCTD9*, *KDM6B*, *LOXL2*, *MYH14*, *PAX2*, *POLRMT*, *RBM20*, *SLC47A2*, *SOX7*, *TCTE1*, *TXNDC11*, and *USP8*. After validation through Sanger sequencing, we confirmed 5 *de novo* missense mutations from 5 different genes; *AKNA*, *CELSR3*, *KCTD9*, *MYH14* and *TCTE1*. None of the *de novo* mutation was found in more than 2 probands.

**Conclusions:** In the WES of family samples of ASD, we observed 5 *de novo* missense mutations from 5 different genes.

## LOW-DOSE ARIPIPRAZOLE FOR BEHAVIOURAL SYMPTOMS IN ANTIPSYCHOTICS NAIVE SUBJECTS WITH AUTISM SPECTRUM DISORDERS: A PROSPECTIVE OPEN-LABEL STUDY

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**Objectives:** Aripiprazole (2-15mg/day) is an atypical antipsychotic approved by the U.S. Food and Drug Administration for the treatment of autism spectrum disorders (ASD) subjects with behavioral symptoms associated with ASD. In order to minimize the potential adverse effects associated with aripiprazole treatment, it is necessary to consider using lower effective dose. The purpose of this study was to examine the efficacy and the tolerability of lower-dose aripiprazole compared to that was used in previous studies for treating behavioral problems of antipsychotics naive subjects with ASD.

**Methods:** This prospective open-label study included 29 subjects with ASD (male 25, female 4, age range, 6–20 years; mean  $\pm$  SD age,  $11.2 \pm 3.4$  years) followed up for 12 weeks after starting aripiprazole treatment. The primary outcome measure was the irritability subscale of the Aberrant Behavior Checklist (ABC-I).

**Results:** Twenty eight subjects received a mean initial and final aripiprazole dosage of  $2.36 \pm 0.95$  mg/day,  $2.87 \pm 1.36$  mg/day, respectively. The mean scores of the ABC-I at baseline and end point were 18.10 and 10.07, respectively ( $p < 0.01$ ). Severe headache was observed only in one subject, which led to discontinuation of aripiprazole. No significant changes in vital signs, electrocardiogram, or laboratory measures occurred. Body mass index (BMI) increased from a mean value of 18.12 at baseline to 19.23 at end point ( $p < 0.01$ ). Mean serum prolactin levels decreased significantly from 11.02 ng/mL (baseline) to 2.82 ng/mL (end point).

**Conclusions:** The results suggest that low dose aripiprazole may be effective and well tolerated for irritability in subjects with ASD. However, significant increase of BMI was observed, which suggests the potential metabolic adverse effects even when using low dose aripiprazole. Additional long-term controlled studies are needed to evaluate the efficacy and the safety of low dose aripiprazole in subjects with ASD.

## THE RELATIONS BETWEEN PARENTAL FACTORS AND PARENT-ASSISTED PEERS<sup>®</sup> SOCIAL SKILLS INTERVENTION IN ADOLESCENTS WITH ASD

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**Objectives:** PEERS<sup>®</sup> (Program for the Education and Enrichment of Relational Skills) is a parent-assisted social skills training for teens with ASD which was validated its effectiveness in Korean adolescents (Laugeson & Frankel, 2010; Yoo et al., 2014). The objective of this study is to examine the effectiveness of the treatment efficacy on parental communication style and to evaluate the effect of parental bonding style on treatment outcome.

**Methods:** Participants included 48 teens with a diagnosis of ASD and verbal IQ $\geq$ 65. A diagnosis was made by three board-certified child psychiatrists following the diagnostic criteria of the DSM-IV-TR and corroborated by the Autism Diagnostic Observation Schedule (ADOS) (Lord et al., 2008) and the Autism Diagnostic Interview-Revised (ADI-R) (Lord et al., 1994). Primary outcome measures included questionnaires and direct observations quantifying social ability and problems directly related to ASD. We administered the Parent-Adolescent Communication Inventory by parents (Noller et al., 1985; Min et al., 1990) for measuring communication style between parents and adolescents, before and after the treatment intervention. Also the Parental Bonding Instrument, rated by both the parents and adolescents, was used for examining treatment outcome according to parent-child bonding style.

**Results:** The mean age of the subjects are 13.7 $\pm$ 1.57 years old (range; 12~18 years) and 93.8% are male. 1) In Communication Style, Open Communication between parents and adolescents was significantly improved after treatment intervention ( $t=-2.89$ ,  $p<0.01$ ), while Reverse Communication Style was not significantly affected ( $>0.05$ ). 2) In relation between Parental Bonding style and treatment outcome, there was significant negative correlation between Controlling of mother and improvement in Social Interaction subdomain score in ADOS (Pearson's Correlation Coefficient = -0.496,  $p<0.01$ ).

**Conclusions:** We observed that the PEERS<sup>®</sup> social skills intervention appears to be efficacious for communication style between parents and adolescents. Also, parental bonding style might influence the treatment outcome of the PEERS<sup>®</sup> social skills intervention.



## ASSOCIATIONS BETWEEN INFANTS' CRYING, SLEEP AND CORTISOL SECRETION AND MOTHER'S SLEEP AND WELL-BEING

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**Objectives:** Infants' continuous crying is a challenge both for the child and the principal caregiver. However, the links between infants' sleep, crying and cortisol secretion and mothers' well-being and sleep have been scarcely investigated. The aim of the present study was therefore to examine the link between cortisol secretion, crying and sleep of infants characterized by infantile colic (IC) and mothers' psychological well-being and own sleep.

**Methods:** Mothers of 24 infants characterized by IC (mean age = 8 weeks, SD = 1.5 weeks) completed a series of questionnaires regarding the infant's crying and sleeping patterns. Infants' sleep was objectively assessed with actigraphs. Cortisol secretion was measured by means of saliva samples in the mornings after waking. After 4 weeks, infants were assessed once again. Mothers completed questionnaires assessing their psychological well-being (depressive symptoms, family strain) and sleep.

**Results:** Mothers' psychological well-being and sleep was greatly predicted by infants' morning saliva cortisol levels, sleep disruptions and crying intensity, whereas infants' crying duration and volume had low predictive value.

**Conclusions:** Mothers with infants characterized by IC are at increased risk for reporting impaired sleep, developing depressive symptoms and reporting higher family strain. Most importantly, this risk seems to be greater if their infants' sleep is fragmented.

## EMOTION REGULATION IN ANXIETY AND DEPRESSION

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Depression and anxiety disorders show high comorbidity and numerous studies have documented the negative effects on various aspects of psychopathology. Both disorders are associated with abnormalities in the regulation of emotion.

**Objectives:** The aim of this study was to compare the ER strategies in healthy children (Control) with the ER strategies in depressed children (MDD) and depression and anxiety comorbid children (MDDanx).

Our hypotheses were: 1. The MDD patients have more maladaptive ER strategies than the Control group. 2. Comorbid MDDanx patients have more maladaptive ER strategies than the MDD group.

**Methods:** N=223 children (ages: 11-18 y.o., gender distribution: 145 male, 78 female) who had at least one MDD episode were compared with physically and mentally healthy children (N=180, ages: 11-18 y.o., gender distribution: 116 male, 65 female).

Patients were evaluated based on DSM IV diagnostic assessment (ISCA-D semi-structural interview). Emotion regulation strategies were tested based on self-rated "*Feelings and Me*" Child version questionnaire. This instrument tests the adaptive and maladaptive ER responses, representing different regulatory domains: behavioral, social-interpersonal, cognitive, and physical.

**Results:** The means for the maladaptive ER scales were found significantly higher and the means of adaptive ER scales were significantly lower in the MDD group compared with the Control group. The MDDanx comorbide group used significantly higher maladaptive ER strategies compared with the MDD patients.

**Conclusions:** Present study demonstrates the strong association between the depression and negative ER strategies. The maladaptive ER is even more characteristic for comorbid patients. Delineation of these dysfunctional strategies may facilitate more efficient prevention and treatment.

## AN ASSESSMENT OF GENE-BY-GENE INTERACTIONS IN DEVELOPMENTAL DYSLEXIA

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**Objectives:** Even if candidate genes for Developmental Dyslexia (DD) have been identified extensively, all known marker associations for this trait explains only a small proportion of heritability (cfr., the missing heritability problem; Maher, 2008; Plomin, 2013). It is plausible that one source of missing heritability is the interactions between genes. We assessed potential gene-by-gene interactions (GxG) on DD-related reading, spelling and memory phenotypes.

**Methods:** The presence of GxG effects were investigated among 18 markers within the *DYX1C1*, *DCDC2*, *KIAA0319*, *ROBO1* and *GRIN2B* genes in 612 children from 493 Italian nuclear families in which at least one member had DD. A general linear model was applied whereby the phenotype was predicted by the main effects of a marker in each of two genes and by the GxG interaction term. We applied the Bonferroni correction and used a threshold of  $p = 0.001$  to infer statistical significance (i.e., 10 gene pairs x 4 phenotypes).

**Results:** Our results support the presence of GxG interaction effects. In particular, GxG interactions between any additional transmission of (i) the rare allele of the *DYX1C1*-rs1259C/G and the rare allele of the *GRIN2B*-rs2268119A/T, (ii) the rare allele of the *TTRAP*-rs2143340A/G and the rare allele of the *GRIN2B*-rs11609779C/T, and (iii) the rare allele of the *KIAA0319*-rs9461045C/T and the rare allele of the *GRIN2B*-rs11609779C/T, lowers the 'Mean Memory Letters' composite z-score of 0.67, 0.55, and 0.50 standard deviation, respectively.

**Conclusions:** We have provided initial evidence that the joint analysis of identified genetic risk susceptibility markers can be exploited in the study of the aetiology of DD-related neuropsychological phenotypes, and may explain part of the missing heritability underlying this developmental disorder (Plomin, 2013).

## **BROADER AUTISM PHENOTYPE AND LIFE ADJUSTMENT OF CHILDREN AND ADOLESCENTS WITH ASD SIBLING IN TAIWAN**

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**Objectives:** The sibling relationship is a unique relationship, starting at birth and continuing until death. Positive or negative sibling adjustment, including the autism sibling gender, age, family characteristics, sibling broader autism phenotype, sibling's relationship, and illness perception of their siblings. There has been less research describe that. As these autism children grow up, as they siblings move on into old age and different development stage, then the autism siblings lives and future is more important. The relationships among siblings are important, dynamic, influential, and long-lasting of all human relationships. This study is to examine the sibling broader autism phenotype, siblings relationship and sibling illness perception and adjustment between children and adolescents with ASD compare with the Down syndrome siblings from the acute wards of a psychiatric hospital and schools.

**Methods:** We applied descriptive study approach in this study. Data from 52 siblings who participated in ASD and DS group. Thirty-five siblings with a brother or sister with ASD were matched by age and gender to 17 siblings with a brother or sister with DS.

**Results:** The study results indicate that the interaction of these sibling and their brothers with autism is a dynamic process. The results present the ASD siblings compared with DS children and adolescents siblings had broader autism phenotype. Reported shows more BAP was affect sibling relationship, illness perception and adjustment.

**Conclusions:** We may have implications for intervention to these study findings when future primary caregivers and health workers care for ASD and DS siblings.

**Key words:** Broader autism phenotype, life adjustment, sibling relationship, illness perception

## HELPING THE HEALING PROCESS FOR INSTITUTIONALIZED CHILDREN WITH ATTACHMENT DISORDERS: A SYSTEMATIC REVIEW OF TREATMENT UTILIZING OCCUPATIONAL THERAPY

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**Objectives:** In extreme rearing conditions like institutionalized care, socio-emotional development in children can be gravely compromised. While research exists centring on the epidemiology and treatment of post-institutionalized children with behavioural and attachment difficulties, the majority of children continue to remain in institutions until their adulthood. For these children, reorganizing care within institutions seems to hold the best evidence thus far.

Occupational therapy (OT) has shown to benefit children in areas of sensory-motor, cognition and inter-and intra-personal development. Integrating attachment-related treatment and OT seem to hold the most all-encompassing form of treatment for institutionalized children with attachment disorders.

This systematic review aims to 1) uncover existing OT treatment relating to attachment disorders in children and 2) explore the possibility of intertwining treatment for institutionalized children with attachment disorders with OT approaches.

**Methods:** 2 search were conducted. 5 databases (AMED, CINAHL, Cochrane, Medline, OTseeker) were searched based on the key words: 1) “occupational therapy”, “attachment”, “children”, and 2) then with “institutionalized children” altogether on February 2014.

**Results:** In the first search, a total of 13 articles/book chapters/newsletters were identified.

Low to moderate levels of positive effect were demonstrated in four aspects of therapy; 1) play facilitation, 2) sensory modulation, 3) structured therapeutic activities and 4) caregiver education targeted at increasing the understanding of behavioural difficulties.

No studies were identified that linked the three key concepts in the second search.

**Conclusions:** Proposal for future research needs to be targeted on the institutionalized child and his social partners/caregivers in implementing a fixed schedule of regular caregiver-child interaction time, structured therapeutic activity that includes expressive and nondirective play therapy.

There is a strong need for empirical investigation in utilizing occupational therapy in the treatment of institutionalized children with attachment disorders.

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## **EFFECTS OF DEPRESSION, ANXIETY AND BEHAVIOURAL SYMPTOMS ON THE TREATMENT OUTCOME OF THE PARENT-ASSISTED PEERS<sup>®</sup> SOCIAL SKILLS INTERVENTION IN ADOLESCENTS WITH ASD**

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**Objectives:** PEERS<sup>®</sup> (Program for the Education and Enrichment of Relational Skills) is a parent-assisted social skills training for teens with autism spectrum disorder (ASD), with established evidence-base in US and Korea (Laugeson & Frankel, 2010; Yoo et al., 2014). The objective of this study is to examine the effects of comorbid depression, anxiety and behavioural symptoms on the treatment outcome of a Korean version of PEERS<sup>®</sup> for enhancing social skills.

**Methods:** We ascertained 47 teens between 12-18 years of age diagnosed as ASD and a verbal IQ $\geq$ 65. Eligible teens were randomly assigned to a Treatment Group (TG) or Delayed Treatment Control Group (CG). Primary outcome measures included questionnaires and direct observations quantifying social ability, social knowledge and communication. Scales for depressive symptoms, anxiety, and other behavioural problems were completed. The effects of those comorbid symptoms on the improvement of social outcomes were analysed by repeated measure ANOVA with statistical significance of  $p < 0.05$ .

**Results:** There were no significant differences at baseline across the TG and CG conditions with regard to age (14.04 $\pm$ 1.64 & 13.54 $\pm$ 1.50 years), IQ (99.39 $\pm$ 18.09 & 100.67 $\pm$ 16.97), parental education, socioeconomic status, or ASD symptoms ( $p < .05$ ). 1) Comorbid state anxiety symptoms measured by State and Trait Anxiety Inventory for Children has a significant influence on the improvement of Communication scores of Autism Diagnostic Observation Schedule (ADOS) ( $p = 0.02$ ). 2) Depressive symptoms measured by Childhood Depression Inventory has a weak but significant effect on improvement of Coping Skills measured by Vineland Adaptive Behaviour Scale ( $p = 0.049$ ). 3) Paternal state anxiety has a significant effect on improvement of social skills measured by Social Skills Rating Scale and Social Interaction subdomain scores in ADOS ( $p < 0.01$ ).

**Conclusions:** We observed that the anxiety symptoms of the adolescents and parents had significant influence on the treatment outcome of PEERS<sup>®</sup> intervention in enhancement of social ability.

## **ADULT AUTISM SPECTRUM DISORDER: WHICH DIAGNOSIS?**

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**Objectives:** To evaluate maintenance and evolution of Autism Spectrum Disorders (ASD) diagnosis during adulthood

**Methods:** We present the follow-up of a pool of patients who were diagnosed at a Portuguese child and adolescent psychiatry Department during childhood and who were discharged at adulthood to adult outpatients psychiatric clinics. We briefly revised the current literature on the diagnosis of adult ASD.

**Results:** These findings show that autism-associated deficits persist during adulthood, although due to factors like maturation, early stimulation and psychiatric comorbidities, these patients are at risk of having other diagnosis in adulthood.

**Conclusions:** Only recently has the diagnosis and treatment of ASD become the focus of attention in adult psychiatry. Although ASD is a chronic condition, the symptoms presentation may change, making diagnostic assessment a challenge for adult psychiatrists.

## INVESTIGATING THE RELATIONSHIP BETWEEN SUBTYPES OF AGGRESSIVE BEHAVIORS AND SEVERITY OF SYMPTOMS IN AUTISM SPECTRUM DISORDERS

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### Objectives:

Some researchers suggest that subtypes of aggressive behaviors are related differently to severity of symptoms in this population. The purpose of our study is to look for correlation between the subtype of aggressive behavior and severity of symptoms as well as known prognosis factors (intelligence, language, epilepsy, imitation..) among children with autism spectrum disorders.

### Methods:

-Subjects: 50 patients who were diagnosed with ASD by a team of child psychiatrists, based on DSM-IV criteria at the department of child and adolescent psychiatry of Razi Hospital in Tunisia.

-Materials: The diagnostic was confirmed with the Autism Diagnostic Interview Revised (ADI-R). Maladaptive behaviors (self-injurious behavior, stereotyped behavior, aggressive behavior) were assessed using the Behavior Problems Inventory (BPI-01) for which we added complementary items to precise the semiology (age of onset, precipitating factors, family reactions...). Each child competencies were evaluated by the Psycho Educational Profile (PEP- R). The Childhood Autism Rating Scale (CARS) was used to evaluate severity of the disorder.

### Preliminary Results:

The age ranged from 3 to 12 years with a mean age of 6 years, and a sex ratio of 3, 8. Prevalence of maladaptive behaviors was 80%; age of onset of aggressive behavior was about 5 years. The presence of aggressivity toward others was correlated with a better prognosis (on the CARS as well as on domains of the PEP-R) than self-injurious behavior. However, the simultaneous existence of self and hetero-aggressivity had no prognostic value.

**Conclusion:** It is critical that the behavior problems inherent in autism spectrum disorders be recognized, evaluated, identified and treated early in order to improve the well being of individuals with autism, their families and society.



## MENTAL HEALTH SERVICE TRANSITION FOR YOUNG PEOPLE BECOMING OLDER

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**Objectives** To explore the transition from Child and Adolescent Mental Health Services (CAMHS) to Adult Mental Health Service (AMHS) analysing health service use before and after the age of 18.

**Methods** A cohort of adolescents 12–17 year old accessed from 2002 to 2010 local health services of Lombardy Region for mental disorders was retrieved from administrative databases. All subjects must have received antipsychotropic drug treatment, hospitalization, and psychiatric outpatient visit two years before becoming older until three years later.

**Results** 291 adolescents were retrieved, 254 attended outpatient visits in CAMHS and 37 in AMHS. 189 (65%) were hospitalized in child and adolescent psychiatric departments, 27 (9%) in adult psychiatric departments, and 75 (26%) in general pediatric departments. Main prevalent rates of psychiatric disorders were: primary psychotic disorders (24%), personality disorders (22%), intellectual disability (12%), anorexia nervosa (10%) and classical autism (7%). After becoming older 216 (74%) still had accessed to the mental health service, and only 43 (20%) were transferred over three years to AMHS.

**Conclusions** The gap between CAMHS and AMHS is probably the shakiest link in the mental healthcare pathway for young people at a time when care continuity should be most efficiently ensured and that will help them with the difficult task of learning to function as an adult. Appropriate service models with systematic and seamless transition protocols or programs for patients with mental disorders requiring continuity of care into adult mental services are one of the future tasks in the field, also involving patients and their families.

## **EARLY DETECTION AND MANAGEMENT OF PSYCHOLOGICAL MORBIDITY FOR ADOLESCENTS IN SCHOOLS - AN INTERDISCIPLINARY LINKAGE MODEL BY DISTRICT MENTAL HEALTH PROGRAM THIRUVANANTHAPURAM, INDIA**

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In adolescents, a crucial targeted group for mental health care interventions, there is a global paradigm shift to primordial prevention and early reprisal of the mental health issues.

**Objective:** Primary objective is to enhance awareness among teachers, parents and students on adolescent behavioral issues and improve management skills. Secondary objective is to provide counseling services to at risk adolescents and establish access to mental health services.

**Method:** The school mental health program “Thalir(Bud)” of District Mental Health Program(DMHP) implements preventive, reconstructive and rehabilitative phases at schools of Thiruvananthapuram district. Multilevel sensitization builds an effective network link between Integrated child development Scheme (ICDS) supervisors, Child Development Program Officers (CDPO) and school counselors of Social Justice department and School Health Nurse of National Rural Health Mission, with DMHP. Classes on awareness and management skills for parents and teachers and on emotional and behavioral problems, substance use, suicide prevention, life skills and stress management for 5<sup>th</sup> to 12<sup>th</sup> standard students (10-18yr age) are taken by trained resource persons of DMHP through structured modules. Classes are followed by counseling camps in schools by mental health professionals for ‘at risk’ students. The referral and follow ups with guardian are to the nearest DMHP clinic and trained medical officers in mental health clinics of Primary Health Centers. Post intervention evaluation is done by teachers with DMHP monitoring.

**Results:** From Jan 2012 to Jan 2014 the program has covered 22,475 students, 503 parents and 392 teachers through 112 schools. Counseling camps catered to 278 students with psychological morbidity.

**Conclusion:** Thus building an effective interdisciplinary network can establish access through schools for wider coverage of mental health needs of adolescents. Sensitization of teachers, parents and school students leads to early identification of psychological morbidity, interventions and access to health care services.

## **BIPOLAR DISORDER IN CHILDREN AND ADOLESCENTS**

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### **Objectives**

Show the particularities of bipolar disorder in childhood and adolescence that unlike the more common presentation than adults. Conduct a brief literature review to present the latest news on this subject in recent years and the DSM V.

### **Methods**

We will use the case of a 11 year old boy who consults for behavior disorders and academic failure, no personal history or known relatives and poor outcome despite multiple treatments tested.

### **Results**

The differential and final diagnosis. Besides exposing all approaches made to the Children's Hospital of date with what the clinical stabilization was achieved for several years.

### **Conclusions.**

It is thought that many children diagnosed with ADHD, conduct disorder and other disruptive pictures, presentations are more or less insidious of future bipolar disorder. As for bipolar disorder in children, mood alterations ranging quickly. The most common symptom is irritability. The most common symptom is irritability. Sometimes involves extensive violence (can be confused with a tantrum, but is much more intensive).

## **PSIQUIATRIA E SAÚDE MENTAL DA INFÂNCIA E DA ADOLESCÊNCIA NO BAIXO ALENTEJO**

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O Serviço de Psiquiatria e Saúde Mental da Infância e Adolescência (SPIA) da Unidade Local de Saúde do Baixo Alentejo é responsável pelo apoio psiquiátrico à totalidade da população entre os zero e os 18 anos desta extensa região do país, tendo a sua sede física em Beja.

São objectivos gerais do SPIA a) assegurar o acesso equitativo a cuidados de qualidade a crianças e adolescentes com problemas de saúde mental, com especial atenção para os que têm perturbações psiquiátricas; b) promover a descentralização dos cuidados de saúde mental, de modo a permitir a prestação de cuidados mais próximos das pessoas e facilitar uma maior participação da comunidade, dos utentes e das suas famílias; c) promover a articulação dos cuidados de saúde mental com os cuidados primários, de modo a facilitar o acesso e garantir a continuidade de cuidados; d) Reduzir o impacto das perturbações mentais e contribuir para a promoção da saúde mental das populações; e) reduzir a taxa de suicídio e o número de tentativas de suicídio, face à elevada incidência das mesmas no distrito de Beja; f) Intervir para a promoção e prevenção em psiquiatria de infância e adolescência.

No presente trabalho apresenta-se o SPIA, em particular a sua vertente comunitária, e identificam-se as principais necessidades em Psiquiatria e Saúde Mental na faixa etária referida.

## **PRESCRIPTION OF PSYCHOTROPIC MEDICATIONS FOR CHILDREN AND ADOLESCENTS IN A SPECIALIZED OUTPATIENT CLINIC**

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**Objectives** Analyze the prescription of psychotropic drugs for children and adolescents included into a service specialized in Psychiatry of Childhood and Adolescence.

**Methods** Review of medical records of 163 patients treated during the period from July 2010 to July 2013.

**Results** 46% of the sample was in use of two or more classes of medications. Only 16% of patients were not using psychotropic drugs. The most prescribed class was antipsychotics (36%), followed by antidepressants (23.4%) and anticonvulsant drugs (22.4%). The antipsychotics accounted for 74% of all prescriptions combined and was most commonly associated with anticonvulsants (23.2%). More than four medications have already been used by 28% of patients. Among patients who use more than two classes of medications the most frequent diagnoses were Mental Retardation (34%) and Conduct Disorder/ Oppositional Defiant Disorder (32%). Considering the patients who have already used more than four medications, the most frequent diagnoses were Mental Retardation (39.2%), Conduct Disorder/Oppositional Defiant Disorder (32%) and Attention Deficit/ Hyperactivity Disorder (25%).

**Conclusion** It is high the prevalence of children and adolescents using psychotropic substances with frequent association of medications. Antipsychotics are the most frequently prescribed class either in monotherapy or combined with other medications. The diagnoses of Mental Retardation and Conduct Disorder/Oppositional Defiant Disorder were most often associated with the use of more than two classes of medications and the previous use of more than four medications. The prior use of multiple medications is frequent and further studies are needed to determine the reason for the constantly drug replacement.

## **EPIDEMIOLOGICAL PROFILE OF CHILDREN AND ADOLESCENT IN A SPECIALIZED SERVICE**

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**Objectives** Outline the epidemiological profile and clinical characteristics of the users of a service specialized in Psychiatry of Childhood and Adolescence.

**Methods** Review of medical records of 163 patients treated during the period from July 2010 to July 2013.

**Results** 69% were male and the average age of patients was 12.1 years. 80.7% were attending school and 21.5% of these were in specialized schools for children with special needs. The average age at which were perceived behavioral changes was 64 months and parents realized them in 64% of cases. After this perception 25% was taken to the neuropediatrician and only 2% was assessed by Child Psychiatrist. The average age of first psychiatric evaluation was 9.2 years. Patients have undergone in treatment on average 40.3 months and the most frequent diagnoses were: Conduct Disorder/Oppositional Defiant Disorder (24.1%), Mental Retardation (22.4%), Attention Deficit/Hyperactivity Disorder (15.5%) and Anxiety Disorders (10.9%). In 8% of the sample there were more than two psychiatric diagnoses. The presence of clinical comorbidities was observed in 41% of the sample with a higher frequency of epilepsy (47%), obesity (12%) and asthma (8.5%). 77% had no regular follow-up and the prevalence of abandonment was of 47.2%. The diagnosis more associated with the outcome of abandonment was the Conduct Disorder/Oppositional Defiant Disorder.

**Conclusion** The diagnosis of mental disorders in this age group is late and, even after the diagnosis, there is a delay in assessment by a Psychiatrist of Childhood and Adolescence. There are difficulties in adherence to treatment which may impair the long-term prognosis. Early detection strategies, psychoeducation and follow-up are essential in order to a better receptiveness and reduce the social and academic impact of mental disorders in childhood and adolescence.

## PREVALENCE OF EMPIRICAL PSYCHOPATHOLOGY IN A PEDIATRIC SAMPLE

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**Objectives.** The present research tries to know the prevalence of psychopathology among children of pediatric specialty services. In addition, externalizing and internalizing syndromes and gender differences were analyzed.

**Methods.** The *Child Behavior Checklist* (Achenbach & Rescorla, 2001) was applied to 203 children between 6 and 12 years-old, which 116 were boys (51%) and 87 (42,9%) were girls. Participants were referred to Clinical Child Psychology Unit at “Virgen de la Arrixaca” University Hospital by Pediatric Care Services from 2008 to 2013.

**Results.** Analysis found that the most prevalent empirical syndromes were social problems (30%), attentional difficulties (26.6%), withdraw (23.2%), thinking problems (19.7%), while that somatic complaints (17.2%), anxiety/depression (14.8%), aggressive behavior (13.8%) and disruptive behavior (9.9%) were the least prevalent syndromes. Boys showed more syndromes than girls and, particularly, externalizing syndromes were higher in boys than girls.

**Conclusions.** This study revealed the high psychopathological prevalence in pediatric samples. According to this, it is necessary early detection of children at risk in order to referring them to specialized Clinical Child Psychology Unit. Thus, pediatric care services should include psychological assessment protocols that allow screening empirical syndromes and offering a psychological attention since their early onset.

## **A CASE OF DELAYED DIAGNOSIS OF ASPERGER'S SYNDROME?**

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A 19-year old male freshman of molecular biology was admitted with symptoms of compulsive washing of genitals after masturbation over homoerotic and paraphilic fantasies and cites, fear of losing control over aggressive impulses, recent history of impulsive aggressive and potentially homicidal behavior. Psychiatric and psychological assessment was recently performed in other psychiatric institutions with multiple diagnoses: obsessive-compulsive disorder, impulse control disorder, gender identity disorder.

**Objectives:** Assessment of anamnestic data from early development and testing for high-functional autism.

**Method:** Clinical diagnostic interview with client and parents and assessment of present psychiatric status; Communication Check-list (adult version); Autism Spectar Quotient.

**Results:** Symptoms were followed by effeminised mannerism, fixed facial expression, monotonous, „robotic-like“, hyperlogical and hyperformal speech, lack of emotional resonance and empathy, inability to lie, sensibility to criticism and changes in routine (finishing high-school and domestic setting changes triggered the crises). Anamnestic data from early childhood: irritated by loud sounds; stereotypical rituals and interests (opening and closing doors, obsession with merry-go-rounds, complex construction games); lack of social skills (gazing at others, one-sided endless conversation on unusual topics); failure to fit in peer groups; subjected to bullying from kindergarten through elementary school; impulsive outbursts (cutting hair, tearing notebooks ); unusual clumsiness; ability to meet educational demands with excellency...

Communication Check-list results: Structural aspects of language developed above average; poorly developed social interactions; extreme deficits in isolated areas of pragmatic competency.

Autism Spectar Quotient: 23/50

**Conclusion:** Anamnestic data from early childhood, symptoms presented on admission and Communication check-list results support the diagnosis of Asperger's Syndrome although AQ results do not. Since the client was constantly coached by his mother, a college professor, the possibility of improvement of social skills in intelligent persons with Asperger's syndrome is discussed along with diagnostic bias and importance of detailed anamnesis.



## PERFIL EPIDEMIOLÓGICO DE TRASTORNOS DISOCIALES (CD) EN NIÑOS Y ADOLESCENTES. MÉRIDA-VENEZUELA, 2001-2010

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**Introducción:** Los trastornos disociales (CD) en niños y adolescentes involucran psicopatía, conducta de reciente y necesaria investigación por la alta prevalencia mundial de violencia juvenil.

**Objetivo:** Comprobar la prevalencia del diagnóstico (Dx) de varios Trastornos con comportamiento disocial (TXD) en niños(as)-adolescentes según CIE 10: F90.1.Trastorno hiperactivo disocial (ADHD-CD), F91Trastornos disociales (CD) F92.Tx disociales-emociones mixtos (CD-E mixto) y los factores asociados edad, sexo, grado de instrucción, estructura familiar, antecedentes patológicos personales y familiares (APP, APF).

**Método:** Recolección datos de historia clínica estructurada (CIE 10 niños/adolescente) en base SPSS 15.0, de toda consulta 2001-2010, para análisis estadístico de los casos con Dx de TXD, descriptivo e inferencial ( $\chi^2$   $p < 0,05$ ).

**Resultados:** Población: 6.501 casos. Muestra obtenida: 195 casos de TXD = (3%) del total de los casos con diagnóstico en trastornos mentales para la población, a predominio de F91.CD (2,5%). Edad: 36,41% adolescentes ( $\bar{x}$ =11,89 años,  $\sigma$ =3,32). Sexo: 71% masculino. Escolarización: 45% primaria. APP: neurológicos (G00-G99) ( $p < 0,00$  F91). Edad padres: ( $\bar{x}$ =32,45 años,  $\sigma$ =18,37. Edad madres: ( $\bar{x}$ =33,60 años,  $\sigma$ =12,93. Instrucción de ambos padres: secundaria, ( $p=0,00$  asociado F92.+padre y  $p=0,07$  F91+madre). Familia extensiva: 32%. APF: Factores psicosociales influyentes en la salud mental (Z00-Z99) ( $p=0,03$  para F91). Procedencia: 82% metropolitana ( $p < 0,00$  F91). Motivo de consulta: 80% problemas de conducta. Referente: 61% sector salud.

**Conclusión:** Los TXD disociales en niños-adolescentes tienen prevalencia en la consulta de psiquiatría infanto-juvenil asociados a factores biopsicosociales que pueden ser intervenidos preventivamente, imponiéndose la práctica del diagnóstico y tratamiento precoz.

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## **BALINT GROUP TRAINING OF ‘THERAPEUTIC EDUCATORS’ IN A THERAPEUTIC COMMUNITY FOR CHILDREN AND ADOLESCENTS WITH SEVERE MENTAL HEALTH PROBLEMS**

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### 1. Objectives

The concept of ‘Therapeutic Educator’ (TE) has been loosely applied since its early proposal, in the context of education of people at risk in various settings. Here we report on the five-year experience of a Balint group (BG) composed of TEs working with children and adolescents in a therapeutic community (TC) in Madrid.

### 2. Methods

The TCs are two centers for medium-long residential care for children and adolescents in care with severe mental health problems. In the BG entered 60 TEs who worked in one TC at any of the four weekly shifts. The group was run by a psychiatrist with psychoanalytic training, and met weekly for 90-min sessions, attended on average by 5 TEs. Typically, participants had to identify and discuss all personal aspects that likely influenced his/her work with the youngsters and their families. Specific objectives laid down were awareness of non-neutrality, professional identity, team work, countertransference, and others.

### 3. Results

In addition to educational functions, the TEs take on therapeutic roles, in three categories: i) **therapeutic companion**, who accompanies the patients outside the *Hogar*, or seeks them when getting out unauthorized, fostering their autonomy and personal capacities; ii) **tutor of resilience**, offering a trustworthy identification model on the basis of a developing privileged bond; and iii) **institutional therapist**, acting in crisis to generate emotional and physical contentions as needed. To achieve these roles, the subjects worked out are the **professional identity, personal-institutional relationships, team building, daily work routines** with patients, and **work with families**.

### 4. Conclusions

The long-term participation in BG improved team work quality, self-reported overall satisfaction and feelings of control and professional competence. In addition, we have achieved deeper insights into the meaning of the TE in complex settings like ours.

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## **ATTACHMENT DISORDER AND ITS EVOLUTIVE PROGNOSIS**

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**Objectives:** The focus of this study is the often disregarded Attachment Disorder (AD) in children and adolescents, specifically its long term evolution into adulthood, and the key value its knowledge has for a better comprehension and treatment of some major psychiatric disorders in adults.

**Methods:** Our sample were 80 subjects of both sexes, diagnosed of AD, who were followed for up to 12 years after staying for periods of 0.5-4.5 years in legal care in either of two therapeutic communities for children and adolescents with mental problems, which constitute the 'Sirio' Project\*. Follow-up was carried out by either of the authors, through personal or telephone interviews, in most cases at six months or shorter intervals.

**Results:** The children or adolescents with AD display as young adults a 4 to 5-fold higher prevalence of major psychopathological disorders than the general population. Moreover, the high incidence of delusion in these patients gives grounds for considering the AD as a pre-delusional state.

**Conclusions:** The AD is highly prevalent but underdiagnosed in children/adolescent in care.

Frequent pre-delusional states occur in AD, making AD a predictor of early psychosis.

The severe negative and long lasting developments rooted in AD demand early and multidisciplinary therapeutic approaches.

The current increase in dysfunctional families and children neglect makes it urgent the need to develop specific programs, such as the 'Sirio' Project, to develop new and effective re-attachment strategies.

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## STUDY LANGUAGE PSYCHOPATHOLOGY

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**Objectives:** The story of patients and instrument assessing psychopathological study of language and its influence on the determination of therapeutic strategies.

**Methods:** Strategies will use inductive hypothesis to ask then be tested with empirical evidence from fieldwork.

**Results:** Producing knowledge about the dimensions of accessibility and dignity in the clinical care of patients in public mental health services. Investigating the processes of construction of subjectivity and their referents representational picture , through allowing constructing a story , the subject (patient) mode hold your personal imprint ( suspended and subject ) to your condition.

Promote conditions of a therapeutic and medico legal transference space, ensuring openness to its potential, the verbal level being the source word and essence of the human being as security. We start from the basic assumption that the essence of language is thus an act of representation of thought. Therefore, the overall purpose of this research is to establish a record of the stories of the patients, through which allows access to the systematic investigation of the mode of the subject, to formulate their actions. However, we believe that the constructed language, the subject tends to be true to his own image. And thus taking possession, apprehension of itself as reflection, understanding is not only possible, but also and especially necessary (removing the need for life). We are surprised that only "primitive" languages &#8203;&#8203;have not yet reached that stage of development, because the words are not reflected in thoughts, for example, remain in the rites and myths of some cultures as a pure outbreak, sequential signals who fail to make a sign. Therefore, our proposal is based on Bühler, who distinguishes language activity Act and Action ( Sprechakt and Sprechhandlung ) in relation to the latter will be using the language, making it a medium. For example: talking to others to help them, deceive them, love them, want them, love them etc) , ie make them act in a certain way . . Not so with the Language Act , as it relates to the act of meaning ( Zeichensetzen ), and the act of giving meaning ( Sinnverleihend ) isolated by Husserl. Therefore, in the linguistic act is therefore an act inherent to the act of speaking. The study of this event is (and integral part of the study of language and constitutes its central core) . Linguistic activity is the root of this link between language and action through communication or dialogue. This is presented as a drama of three characters: the world (the goal of the talk content), announcer (interviewee - patient) and the recipient (appeal to an Other, a similar a health professional, an interviewer etc

**Conclusions:** every statement language is always and essentially a sign to refer to content in this sense is a representation, the recipient: interviewer attracted by its content and in terms of its appeal of the respondent and being the subject who in his story that demonstrates and reveals linguistic attitude. Therefore, we pose the questions revolve around the interaction between interrogation opinion builds and commissioning irrational acts by speaking subjects of the disease versus therapeutic strategies, discourse and narrative significance.

## **EMOTIONAL ABUSE IN CHILDHOOD AND ADOLESCENCE: A REVIEW OF THE LITERATURE**

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**Objectives:** to conduct a comprehensive review of the world literature on the topic of mental health in childhood, in the context of emotional abuse in childhood and adolescence, to establish better definition and characterization of the impact of emotional abuse in children and adolescents at different stages of life and in different social systems.

**Methods:** the review covered the period from 1993 to 2013 in the databases PUBMED, MEDLINE SCIELO. Various descriptors used to ensure a wide range against the backdrop of publications. Of the 201 selected articles, 58 met the criteria and were included all the original article, available in full and appropriate to the theme. Were excluded studies whose discussion lacked comprehensiveness and relevance to theme as well as studies that showed that repeated; then were individually summarized and analyzed according to the most relevant points about the subject.

**Results:** content analysis resulted in the following categories: epidemiological aspects, definition, causes, neurobiology/genetics, prevention, difficulties in diagnosing it, to define it, and the roles of professionals who treat abused children. As noted, there has been increased interest in the topic in the last three years.

**Conclusions:** emotional abuse in the context of childhood and adolescence is the most destructive form of violence by providing emotional indifference or disqualification of parents and/or caregivers for the child as well as disrespect to their psychological limits; repercussions ranging from social inadequacy, low self-esteem, anxiety, even depression, aggression, violence, personality disorders, which may persist throughout life.

**Keywords:** Abuse in childhood; Emotional abuse; Psychological violence; Psychological abuse; Early stress; Childhood.

## **CHARACTERISTICS OF PATIENTS REFERRED TO A CHILD AND ADOLESCENT MENTAL WELLNESS SERVICE (PSYCHIATRY LIAISON SERVICE) AT A SPECIALIST PEDIATRIC HOSPITAL IN SINGAPORE.**

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### **Objectives**

The objective of this project is to evaluate the profiles and outcomes of children referred to the Child and Adolescent Mental Wellness Service (CAMWS) within a specialist tertiary pediatric hospital in Singapore to identify the needs and streamline the service delivery.

### **Methods**

A retrospective case note study was conducted for patients referred to pediatric psychiatry liaison service between 2011-2012. Approval was given by the ethics board.

### **Results**

There were 500 referrals between 2011-2012. Data was collected for 291 cases. 51% of children were aged 12 and below and 48% were between 13-19 years. 52% were females and 64% were of Chinese origin. There were 59% of outpatient referrals whilst 41% were for inpatient consultation. The main reason for referral was Inattention (15%), conduct and behaviour issues (14%), stress and anxiety (19%) and non-suicidal self-injury (16%). The common diagnosis was stress related disorders (25%), Attention Deficit Hyperactivity Disorder (18%) and depression, (10%). Only 32% of children had medical comorbidities. More than 90% of them received treatment on an outpatient basis and only less than 2% needed admission to specialist mental health hospital.

### **Conclusion**

This is the first study in Singapore looking at a psychiatric liaison service in a tertiary specialist pediatric hospital. Academic stress, psychosocial factors, parent child conflict and bullying were the most common precipitating and predisposing factors. This study highlights the need for a comprehensive psychiatric liaison service within a pediatric hospital as children may present to the pediatricians due to the stigma associated with going to a mental health hospital. The liaison service can provide a comprehensive and holistic care by recognizing not just the complex medical needs, but also the emotional and behavioural needs of the children and adolescents and aim to improve the quality of their life.

## **INTRODUCTION OF PLAT (PRE-LINGUISTIC LANGUAGE ABILITY TEST)**

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### **Objectives**

This test is to assess pre-linguistic language ability from birth to the 400th day. This test shows the readiness of word comprehension and production the child has attained.

### **Methods**

The test covers three domains. 1. sound and utterance of voice including social babbling, proto-language and monoleme, 2. communication functions and comprehension of surroundings including smiling, exploring, pointing and comprehension of motherese, 3. observation and use of a symbolic function including contemplation, comprehension of signs, customs and usage of toys. There are 47 items in these three domains.

### **Results**

Percentage of acquisition of each item is showed. Mean score at each day is on a linear curve according to days after birth. An acquisition curve of 47 items will be presented. Factor analysis indicates that it consists of five steps at this age; 1. early stages of communication, 2. positive attitudes to the surrounding environments, 3. prior to utterance of words, 4. appearance of first words and differentiation of linguistic functions, 5. increasing vocabularies.

Standardization was completed using 119 infants (a total of 281 times). Inter rater reliability is 0.989(0.886 in 1-100 day, 0.921 in 101-200 days, 0.866 in 201-300 days, 0.955 in 301-400 days after birth). Predictive validity is 0.60 in PPV and 0.94 in NPV in age 1-200 days, 0.67 in PPV and 1.00 in NPV in age 201-400 days.

### **Conclusions**

Predicting delays in development of speech and language attained from babyhood is measured by the test. Some cases using this test are shown,(e.g.; hearing loss infants, Down syndrome, autistic disproval, asphyxia, premature babies, and normal development and hypothyroidism).

## **PSYCHOPATHOLOGY IN PARENTS OF CHILDREN TREATED IN A MENTAL HEALTH CLINIC**

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### **Objectives:**

The literature suggests that parental psychopathology is associated with parental difficulties, including parents' lack of confidence in their ability to parent, high stress, too much or too little discipline, punishment and verbal hostility. These behaviors seem predictive of several problems noted in children, including psychiatric disorders, behavioral disorders and poor academic performance.

We conducted a descriptive study of the psychopathology in parents of children treated in a mental health clinic. We analysed which are the most frequent disorders among parents and their offspring.

### **Methods:**

We have visited 1200 kids during a year and we have asked their parents if they are attending a psychiatrist. Only those parents who are treated in a mental health clinic are taken in consideration for the study thus we can corroborate with their psychiatrist the psychopathology they suffer.

### **Results:**

57 parents: 39 mothers and 18 fathers are attending to a psychiatrist. The most frequent diagnosis among mothers is borderline personality disorder (15) and in the fathers group substance abuse disorder (9).

The most frequent diagnosis between children whose mothers are diagnosed of borderline personality disorders are adaptive disorders (12 girls and 2 boys) and conduct disorder is the most frequent diagnosis among kids of fathers suffering from substance abuse disorder (6 boys and 3 girls).

We are aware that the number of parents suffering from mental disorders is higher than the ones we registered but many of them never seek help and thus are never diagnosed or treated.

### **Conclusions:**

Genetic and environmental vulnerabilities put children of parents suffering from mental disorders at risk for various psychopathologies. Detecting parental psychopathology, advice them to contact a psychiatrist and teaching them parenting strategies is of crucial importance for the evolution of the children attending to outpatient mental health clinics.



## **ROLE OF M2 MUSCARINIC RECEPTORS IN THE DEVELOPMENT OF SELF DIRECTEDNESS IN CHILDREN AND ADOLESCENTS.**

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**Objectives:** The muscarinic acetylcholine receptor M2, also known as the cholinergic receptor, muscarinic 2, is encoded by the CHRM2 gene and generally lead to inhibitory-type effects. These receptors are broadly implicated in synaptic plasticity, learning, memory, attention, motor control (Volpicelli et al., 2004); CHRM2 polymorphisms showed stronger associations with a composite measure of externalizing behavior ( Dick et al., 2008;), affective disorders (Gibbons et al., 2009;) and development of personality traits (Hendershot et al., 2011;).

Here, we explored the association between selected SNPs spanning within the CHRM2 (i.e., rs7800170A/C; rs1824024A/C; rs324650A/T; rs8191992A/T) and the Junior – Temperament and Character Inventory - J-TCI traits (Cloninger et al., 1993).

**Methods:** We performed a family-based association study to determine whether the CHRM2 gene influence the J-TCI traits, in a large cohort of 266 Italian nuclear families selected from an ongoing comprehensive project on child and adolescent psychopathology. Genetic association was investigated by the quantitative transmission disequilibrium test (QTDT, version 2.5.1; Abecasis et al., 2000). Quantitative traits were analyzed using the ‘-wega’ and the ‘-ao’ options. Empirical p-values were computed from 10000 Monte-Carlo permutations.

**Results:** Evidence for significant association was found between the character trait ‘Self-Directedness’ and the common allele ‘C’ of the CHRM2-rs7800170A/C marker ( $\chi^2= 8.51$ ;  $df= 232$ ; nominal p-value= 0.004; empirical p-value= 0.003; 151 informative families; genetic effect = -4.836), and the rare ‘C’ allele of the CHRM2-rs1824024A/C marker ( $\chi^2= 9.14$ ;  $df= 230$ ; nominal p-value= 0.003; empirical p-value= 0.005; 143 informative families; genetic effect = -5.185).

**Conclusions:** These results provide preliminary evidence of an association between the CHRM2 gene and “ Self-Directedness”, as assessed by J-TCI, thus suggesting a role of M2 muscarinic receptors in the development of a proper competence toward autonomy, reliability and maturity in child and adolescents.

## **BODY IMAGE IN ADOLESCENT AND PSYCHOPATHOLOGY**

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**Objectives:** Body image satisfaction during adolescence has received attention because of its significant role as a risk factor in predicting depression, eating disorders, and low self-esteem. This work intends to evaluate body image into two groups of adolescents (one with and other without pedopsiquiatric following), considering genre, and verify if there is a relation between body image, eating and sports habits on adolescents, and correlate body image with the level of satisfaction of their relationships.

**Methods:** Application of The Body Shape Questionnaire (BSQ) and The Strengths and Difficulties Questionnaire (SDQ) adjusted to Portuguese population (SDQ-Por). Questionnaires on socio-demographic, eating and sport habits, specifically designed to the study, were filled. The data was analyzed by SPSS version 20.

**Results:** The sample is constituted of 73 participants, 34 females and 39 males. Of them, 38 were followed by pedopsychiatry and 35 not. The participant's age ranges from 11 to 18 years, with an average of 14,99 years and a offset of 2,37 of the normal standard. The level of Satisfaction with the body is negatively correlated with the score on the Body Shape questionnaire (BSQ). Adolescents who don't do sports show a lower level of satisfaction with their body. Higher results on this questionnaire (BSQ) have shown better eating habits. There is a positive correlation BSQ and SDQ, lower satisfaction with the body is associated to a greater rate of psychopathological disorder. A greater satisfaction with the body is correlated with a greater satisfaction with their relationships.

**Conclusion:** Dissatisfaction with the body is particularly problematic during adolescence. This study allows rethinking self-concept programs and a more satisfying relationship with body image in order to reduce psychopathology incidence.

## **PATTERN OF PSYCHIATRIC DISORDERS IN A CHILD AND ADOLESCENT PSYCHIATRY CLINIC REGISTRY IN BEIRUT**

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**Objectives:** Data on children and adolescents seeking mental health care in Lebanon remain inexistent. The current study aims at describing the demographic characteristics and prevalence of disorders in patients seeking treatment at the Child and Adolescent Psychiatry clinic (CAP) at the American University of Beirut – Medical Center, a major referral center in Lebanon

**Methods:** 195 patients aged 4 years to 17 years and 11 months visiting CAP for the first time during the period between January 2011 to December 2012 were recruited into a clinic registry. All parents were asked to fill out a demographic sheet and the Strengths and Difficulties Questionnaire– Parent Report (SDQ-P), while adolescents aged above 11 were asked to complete the SDQ –Child Report (SDQ-C). Clinical diagnoses were generated based on the DSM-IV-TR by a child and adolescent psychiatrist after one or two visits with the parent and the child.

**Results:** The mean age of our sample was  $11.74 \pm 4.04$  years with a male to female ratio of 1.91. 53.8% of our sample came from a household where both parents have at least a bachelor's level college degree. The majority (55.4%) had only one disorder. The most prevalent disorders in children (ages 4-11) were disruptive behaviour disorders (52.6%), anxiety disorders (17.9%), and pervasive developmental disorders (15.4%). In adolescents (ages 12-17), the most prevalent disorders were anxiety disorders (44.3%), mood disorders (32.2%), and disruptive behaviour disorders (27.8%). The mean total SDQ-P was 17.36 while the mean SDQ-C was 16.22, both suggesting “intermediate” likelihood for disorders.

**Conclusion:** The prevalence of anxiety disorders in adolescents presenting to a major CAP clinic in Beirut is higher than the prevalence of anxiety disorders in a similar population in more developed countries while the prevalence of other psychiatric disorders is similar to what has been reported worldwide.

## **TEENAGE PREGNANCY IN MALAYSIA, ITS ASSOCIATION WITH KNOWLEDGE, ATTITUDE AND PRACTICE OF RISKY SEXUAL BEHAVIOR AND ADVERSE CHILDHOOD EXPERIENCES**

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### **Objectives:**

Teenage pregnancy, on the increase in conservative Malaysia is related to serious morbidity (eg depression) and mortality. Risk factors need to be explored to increase awareness in the light of prevention. This study aimed to determine the factors that contributed to teenage pregnancy with emphasis on the knowledge, attitude and practice of risky sexual behaviour.

### **Method:**

This case-control study was part of a broader teenage pregnancy study. Pregnant teenagers, 11-19 years, (n=114) from government-run shelters throughout Peninsula Malaysia and 101 controls from schools, completed a 59 item self-report measurement on Knowledge, Attitude and Practice regarding Risky Sexual Behaviour.

### **Results:**

Pregnant teenagers were more knowledgeable about sexuality than controls (p ranging from <0.001 - 0.015). They were more liberal in their attitude towards sexuality (p ranging from 0.001 – 0.016), e.g. ‘abortion is allowed for pregnancy out of wedlock’, which is against Malaysian cultural norms. They were also involved in high risk behaviour (p ranging from <0.001-0.018), such as accessing pornography (p < 0.001). Multivariate analysis using logistic regression showed that being easily persuaded by boyfriend (OR=4.5, (CI 2.0-9.8) p<0.001), having peers who were sexually active outside of marriage (OR=4.0, (CI 1.8-8.9)p=0.001), involvement in smoking (OR=3.1, (CI 1.2-8.4) p=0.026), low family income (OR=3.3, (CI 1.5-7.2) p=0.003) and history of being abused (OR=4.1, (CI 1.4-12.4) p=0.012) were independent predictors of pregnancy.

**Conclusions:** Pregnant teenagers, despite being knowledgeable about high-risk behaviour, still endorsed risky sexual practices. Teenagers who smoked, experienced poverty and maltreatment, known Adverse Childhood Experiences, as well as those who were under the peer pressure of sexually active peers or boyfriends were rendered at risk of teenage pregnancy. Effective primary prevention needs to be instituted to prevent adolescents from having unwanted pregnancies.

## **PREVALENCE OF OPPOSITIONAL DEFIANT DISORDER AND CONDUCT DISORDER AMONG THE PRIMARY SCHOOL CHILDREN**

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**Objectives:** To identify the prevalence of Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD) in primary school children.

**Methods:** After taking approval from the institutional ethics committee, nine hundred children aged between 6 and 11 years were assessed from four different schools' in the Indore district of Madhya Pradesh. A written informed consent was obtained from the subjects and their parents before including them in the study. In the first phase, the presence of ODD and CD were screened by using Rutter Child Behaviour Questionnaire (CBQ) and those who were screened positive were subjected to detailed psychiatric interview using DSM-IV-TR criteria for confirming the diagnosis.

**Results:** The prevalence of ODD among primary school children was found to be 7.73%. Prevalence was found to be equal among male and female. Majority of the children having ODD were from the lower socio economic status (57.14%). The prevalence of CD among primary school children was found to be 5.48%. Prevalence was found to be higher among the males (66.67%) as compared to that of females (33.33%). Like ODD, the prevalence of CD was also more common among the children from lower socio economic status (71.42%).

**Conclusions:** The ODD and CD are fairly common among the primary school going children. ODD was present equally among both the sexes and CD was present more among the boys. Both the conditions were more commonly present in the children of lower socio economic status.

## **ATTENTION-DEFICIT HYPERACTIVITY DISORDER (ADHD) IN CHILDHOOD AND THE RISK OF LATER SUBSTANCE USE DISORDER (SUD)**

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**Objectives:** This population-based cohort study examines the relationship between ADHD in childhood and SUD in adolescents or early adulthood. Previous studies have found ADHD to be an important risk factor for later SUD, but it remains unclear whether the effect is mediated by comorbid conduct disorder, family history of psychiatric disorders/SUD or socioeconomic factors. Previous studies included males only or only small samples of females with ADHD. With a large cohort made from the Danish national registers we will perform a prospective follow-up study, including the largest sample – to our knowledge - of females with ADHD, investigating the association between ADHD and SUD and controlling for potential confounders.

**Methods:** The cohort consists of all children born in Denmark in 1990-2000 (N≈600.000), identified from the Danish Civil Registration System (DCRS). By accessing the Danish Psychiatric Central Register and cross-linking the key identifier from DCRS, we merge information on the child's date of ADHD and SUD diagnosis, psychiatric history, age and gender. Each cohort member is followed prospectively, until date of diagnosis of SUD, death, immigration, or end of follow-up, 31.12.2013, whichever comes first. Incidence rates of SUD will be estimated for subjects with and without ADHD. Hazard ratios and 95% confidence intervals are estimated by Cox-regression and adjusted for familial ADHD and SUD history, and socioeconomic status at the child's birth.

**Results:** Analyses are not completed, but results will be presented at the conference.

**Conclusion:** This study will contribute with extensive knowledge on the risk of SUD in both males and females with ADHD from the largest sample-size to date. The results are valuable in future guidelines for treatment of SUD and preventive actions towards comorbidity of ADHD.

## **DO SOCIALLY ANXIOUS ADOLESCENTS SHOW “DEPRESSIVE” CONSISTENT LOW SELF-ESTEEM OR “PARANOID” DEFENSIVE INCONSISTENT SELF-ESTEEM?**

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**Objective:** Although socially anxious individuals tend to be both depressed and paranoid in regard to others' judgments, recent studies suggest that social anxiety is not associated to (a) consistent low implicit (ISE) and explicit self-esteem (ESE), as it happens in depression, or (b) defensive inconsistent low ISE and high ESE, as it happens in paranoid delusions. Evidence suggests that socially anxious people show low ESE and high ISE.

**Method:** To test this hypothesis, 84 adolescents (aged 12-18 years old) were assessed on measures of psychopathology, ISE and ESE.

**Results:** Results indicated that social anxiety predict low ESE ( $\beta=-.514$ ;  $p<.01$ ) but it is not associated to ISE. In addition, social anxiety was associated to decreasing inconsistent self-esteem ( $\beta=-.376$ ), although inconsistency increased with decreasing ISE ( $\beta=-.696$ ).

**Conclusions:** These findings suggest that, against predictions, social anxiety is associated to inconsistent self-esteem in cases of negative ISE.

## **EEG AND EPIGENETIC STUDY OF CHILDREN AND ADOLESCENTS WITH AUTISTIC SPECTRUM DISORDERS**

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**Objectives.** Autism is multifactorial developmental disorder characterized by widespread impairment of socialization, restricted interests, and repetitive stereotyped behavior, now affecting about 1 of 88 children. Autism has pronounced genetic predisposition. Gene mutations, microaberrations and variations of genome were shown. There is a large body of evidence that oxidative stress plays significant role in the pathogenesis of autism. Cell's resistance to oxidative stress is determined, among other factors, by copy number of transcriptionally active genes for rRNA (ribosomal genes) (Porokhovnik L., et al., 2013). Present study was designed to find the differences in EEG between healthy children and patients with autism spectrum disorders, and correlations of EEG pattern with autism severity and number of active ribosomal genes.

**Methods:** EEG recording, genetic and clinical studies have been performed for 2 groups of 3-18 years old children: healthy group and of autism spectrum disorders (F84.0, by ICD-10).

**Results:** The basic features of EEG pattern of autism were increased level of beta activity mostly in frontal and central regions, decreased level of theta and alpha activity, and lowered EEG coherence that decreased with age. Nevertheless alpha frequency was not differed from normative data. The values of copy number of active ribosomal genes were significantly lower in autistic group than in healthy population, and correlated with severity of autistic feature and beta activity level.

**Conclusion:** Children with autism were more sensitive to oxidative stress than healthy children. Environmental impacts are considered as external factors, which provoke manifestation and modulate the course of autism.



## REFLECTIVE FUNCTION AND SECURE ATTACHMENT AS RESILIENT STRATEGIES IN IMPAIRED ADOLESCENTS

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**Objective:** The aim of this study was to analyze to what extent attachment style and reflective function (mentalization) moderate resiliency in a sample of adolescents from the general population. We hypothesized that 1) good mentalization capacity and secure attachment style protect adolescents from impairment, and 2) that fearful-avoidant attachment style moderates resiliency along with mentalization capacity.

**Method:** A sample of 276 adolescents aged 12 to 18 years old were assessed in the First Phase of a study about Social Anxiety (SA). In the Second Phase, 80 adolescents with high and low levels of SA were selected.

**Results:** In the whole sample, SA was predicted by low resiliency ( $\beta=-.31$ ) and mentalization problems ( $\beta=.49$ ). In the subsample, mentalization moderated the effect of resiliency on SA ( $\beta=-.49$ ), general anxiety ( $\beta=.37$ ), somatization ( $\beta=.28$ ), depression ( $\beta=.37$ ) and low self-esteem ( $\beta=-.37$ ).

**Conclusions:** Results mostly support the moderating effect of attachment style and mentalization on resiliency in adolescence, which points out the interest in paying attention to this psychological construct to understand future risk and resilience trajectories.

## **ABNORMAL FEATURES OF MEG-RECORDED “RESTING STATE” GAMMA OSCILLATIONS IN CHILDREN WITH AUTISM SPECTRUM DISORDER**

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**Objectives:** Gamma oscillations (>25 Hz) in cortical networks crucially depend upon inhibitory GABA-ergic cells and provide a precise coordination of neuronal firing necessary for effective information processing. Mounting evidence for deficient GABA transmission in ASD point to gamma oscillations as a putative biomarker of autism. However, recent research showed that EEG-measured gamma oscillations may mainly reflect muscle activity. The aim of the study was to investigate gamma oscillations recorded by MEG, which is much less prone to myogenic artifact than EEG technique.

**Methods:** Twenty five ASD children aged 7 to 15 years and 25 age-matched controls participated in the MEG study. “Resting state” gamma oscillations were measured during eyes open condition. Averaged magnetic power spectrum gave a measure of the amplitude of the magnetic signal at each frequency.

**Results:** Both low (25–45 Hz) and high (55–95 Hz) gamma oscillations were pathologically increased in ASD compared with age-matched control. In children with ASD the gamma power correlated positively with autism quotient test scores and with degree of developmental delay. Besides, low frequency gamma activity (25–45 Hz) often corresponded to abnormal discrete oscillatory bursts appearing in narrow frequency bands and lasting several hundreds milliseconds. These low gamma oscillations frequently appeared at approximately the same time in several gradiometers positioned over different cortical areas, forming distinct local spatial patterns.

**Conclusions:** The data obtained suggested the abnormality of cortical circuit in ASD that is proposed to generate aberrant high-frequency oscillations through disinhibition. These findings may also explain heightened risk of epilepsy in ASD.

## PSYCHIATRIC DISORDERS IN CHILDHOOD AND THE RISK OF LATER MAJOR DEPRESSIVE DISORDER

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### Objectives

Previous studies suggest an association between psychiatric disorders in childhood and the later development of major depressive disorders (MDD). However, no prospective population-based cohort study has been able to directly compare the risks of MDD following a wide spectrum of child and adolescent psychiatric disorders.

We aimed to estimate the risk of later MDD in children and adolescents diagnosed with one of eight different psychiatric disorders before the age of 18 compared to children without psychiatric disorders and in addition, directly compare risk of later MDD between children with different psychiatric disorders in childhood.

### Methods

Using Danish population-based registers we identified persons born in Denmark from 1990 through 2000, and followed them from their 10<sup>th</sup> birthday through 2012. Using Poisson regression we estimated the risk of later MDD (ICD-10: F32-33) in children exposed to one of eight different psychiatric disorders, compared to unexposed, adjusted for age, gender, birth-weight, and family history.

### Results

We followed 603,333 persons, contributing a total of 4.5 mill person-years (pyrs). Among these 7,787 were diagnosed with MDD (incidence=1.7/1000 pyrs); MDD-incidence in the exposed was 7.1/1000 pyrs. Preliminary results suggest an increased risk of MDD five years after the first psychiatric diagnosis in six of eight childhood disorders: Anxiety disorders (IRR=2.78, 95% confidence interval: 2.16-3.52), eating disorders (IRR=2.55; 1.75-3.57), tic disorder (IRR=2.22; 1.60-2.99), autism spectrum disorders (IRR=2.20; 1.78-2.67), Attention-Deficit/Hyperactivity Disorder (IRR=1.65; 1.36-1.97) and conduct disorder (IRR=1.77; 1.27-2.38) and two were not at increased risk: Other developmental disorders (IRR=1.18; 0.86-1.58) and attachment disorder (IRR=0.95; 0.65-1.32).

### Conclusions

Our study showed that most disorders were significantly associated with an increased risk of later MDD, and that children with anxiety disorders seem to carry the greater risk. These results indicate that clinicians should be very aware of emerging depressive symptoms in certain groups of patients.

## **ADOLESCENCE AND IMPULSIVITY EVOLUTION AND TREATMENT IN ONE ADOLESCENT WITH COMORBIDITY BETWEEN BULIMIA NERVOSA , BIPOLAR DISORDER, ADHD, CANNABIS ABUSE IN THE CONTEXT OF FAMILY DYSFUNCTION**

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Vargas Castro J.A., Canudas A.,Grau T., Faus G., Sánchez Pvedano M.

### **BACKGROUND:**

There is a high comorbidity between the impulsivity seen in Eating Disorders(ED) such as Bulimia Nervosa, Obesity, Binge(ED), Pica, with Externalizing disorders(ExtD), and Bipolar disorder(BD), because of their low tolerance to frustration, irritability, outburst, and low awareness of limits. And many times there is also the presence of disorders related to substance use.

### **OBJECTIVE:**

Demonstrate by reviewing a case, the diagnostic comorbidity between Bulimia Nervosa, Bipolar disorder and one type of Attention Déficit Disorder with Hyperactivity, associated with a pattern of substance abuse with the same effective psychoterapeutic and psychofarmacological treatment, and demostrating the posible same Neurobiological root.

### **METHODOLOGY AND RESULTS:**

A seventeen-years-old adolescent, with a five year history of hyporexia, vomiting and bingeing, with hyperactivity, inattention, and impulsivity (BMI=17) in the context of greater family dysfunction. There was also cannabis abuse. She had received treatment with antidepressives and mood stabilizers. By age fourteen, she was diagnosed of Bulimia Nervosa in comorbidity with Attention Deficit Disorder with Hyperactivity in the Eating Disorders Institute (ITA). We needed to change the psychopharmacological treatment, because still the sintomatology with irritability, distractibility, restlessness, anger outburst, hyperactivity, grandiosity and dysphoria. In the test of Young Mania Rating Scale and HCL-32, the results were compatible with BD. The new pharmacological treatment were with the Methylphenidate (already begun with the diagnosis of ADHD) and Aripiprazol, associated with psychotherapeutic management and family therapy. Now the prognosis as is excellent (CHIP-AE), and there is absence of substance use over 6 months.

### **CONCLUSIONS:**

The eating disorders, with impulse control deficits, have a high etiopathogenic relationship with Bipolar disorder, and externalizing disorders-ADHD-, and the same psychotherapeutic and psychopharmacological treatment, could be effective.

## **SENSORY PHENOMENA IN OBSESSIVE COMPULSIVE DISORDER – CHILDREN AND ADOLESCENT STUDY**

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Sensory phenomena is a term used to define uncomfortable or disturbing sensations, perceptions, feelings or urges that either precede or accompany repetitive behaviors such as compulsions or tics. Obsessive Compulsive Disorder (OCD) patients might feel driven to repeat compulsions until they experience a sense of relief from these uncomfortable sensations. Sensory phenomena can be divided into physical and mental. Evaluation of the presence and severity of sensory phenomena is relevant because some studies have reported that patients with early-onset and tic related OCD show more sensory phenomena and some report that these sensory phenomena cause even more distress than the compulsions.

**Objectives:** Evaluate the presence of sensory phenomena in OCD children and adolescents.

**Methods:** Fifty outpatients, meeting Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, criteria for OCD, were assessed with the University of São Paulo-Sensory Phenomena Scale, Children's Yale-Brown Obsessive-Compulsive Scale, Dimensional Yale-Brown Obsessive-Compulsive Scale and Yale Global Tic Severity Scale.

**Results:** Children and adolescents observed to date were aged between 6 and 17 years. Fifty six percent were male. Data relating to score of scales is still under evaluation at the time of submission.

**Conclusions:** We didn't find any study about sensory phenomena in OCD children and adolescent. We intend to broaden the knowledge on this subject, trying to infer which subgroups of OCD children and adolescents show more sensory phenomena.

## **NEW TECHNOLOGY IN CHILD AND ADOLESCENTS**

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### **OBJECTIVE**

Determine if the use of new technology(the Internet-Videogames-Mobile Phones-TV)by adolescents could share the same pattern,even addiction, as seen in Eating Disorders-ED and Externalizing Disorders-Ext.D, but with alterations in impulsivity and understanding which share the same way dysfunctional neuropsychological.

### **INTRODUCTION AND PURPOSE**

New technology provides a better quality of life; the problem is their addictive potential for adolescents,the elderly, people with impulse control disorders, specifically in Eating Disorders and Externalizing Disorders, which is what we observe in the Institute de Trastorns Alimentaris and our program ITA-Conduct.

### **METHOD**

This is a descriptive-comparative study,with diagnosis, according to our protocol (DSM-IV/CIE-10),and the application of four individual instruments:BIS.1(Barratt Impulsiveness Scale),DENA(Screening Questionnaire of New Addiction),IAT(Internet Addiction Test) and PVP(Problem Video Game Paying).The population was divided into two groups: Eating Disorders(n=12) and Externalizing Disorders(n=14), within the age group 12 to 17 years old at our Argentona and Barcelona-Centers.

### **RESULTS**

The findings found the pattern of impulsivity to be higher in adolescents with Externilizing Disorders than for those with Eating Disorders. The two groups had a similar pattern of new technology use and there were significant differences in the frequency of mobile phone use,it was higher in ED that Externalizing Disorders.

### **CONCLUSIONS**

The use and potential abuse of new technology is similar in adolescents hospitalized for Eating Disorders and pathologies related to Externalizing Disorders.

Unplanned impulsivity, typhical in Externalizing disorders and pathologies with a lack of impulse control, is related to behaviors similar to the pattern seen in Internet Addiction.

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## **“THE POSSIBLE EFFECTIVENESS OF PSYCHOTHERAPEUTIC APPROACHES FOR THE CHILDREN WITH PERVASIVE DEVELOPMENTAL DISORDERS”**

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**Objectives;** In general, psychotherapeutic approaches for the children with pervasive developmental disorders (PDDs), who already had difficulty in social adjustment, thought to be ineffective. However, in the clinical point of view, psychotherapy-either verbal or non-verbal-for the PDDs may have some effects, not only on their secondary disorders but also on their core symptoms.

In this report, we analyzed the PDDs cases that applied psychotherapy and discussed the possibility of that approaches.

**Methods;** We analyzed the data of 63 PDDs cases who had applied psychotherapy at the child psychiatry outpatient in a general hospital for 3 years, from 2010 to 2013. CGI(Clinical Global Impressions)scores were used for evaluation.

**Results;** In 53 cases, patients evaluated their improvement in social adjustment, with CGI scores.

**Conclusions;** We conclude that psychotherapy for the PDDs, either verbal or non-verbal, have some effects on their social adjustment. As Hayao Kawai pointed, “the lack of autonomy” is the essential characteristics of the PDDs, therefore the psychotherapy focused on that characteristics may have possibility.

We would like to introduce some cases and discuss more in detail.

## **IS SOCIAL ANXIETY ASSOCIATED TO A WEAKENED SELF-FAVORING EFFECT? IMPLICIT- AND EXPLICIT- SELF AND OTHERS IMAGE IN SOCIAL ANXIETY**

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**Objectives:** Previous studies support that adolescents tend to have a more positive self-than others- image. This self-favoring effect may protect them from concerns related to rejection and social exclusion. Thus, the vulnerability of socially anxious people to criticism and their fear of negative evaluation could be partially explained by a reduced or absent self-favoring-effect. This study aimed to examine to what extent social anxiety in adolescence is associated to a weakened self-favoring effect.

**Methods:** Seventy-six adolescents (aged 12-18 years) were classified in two groups on the basis of their level of social anxiety (i.e., 41 with high social anxiety and 35 controls) and were assessed on measures of implicit (Go/No-go Association Task) and explicit self and others-image (Brief Core Schema Scales).

**Results:** Results revealed that implicit self-image was significantly better than implicit others-image in the control group (Mean=27.2, SD=46.7; Mean=-8.4, SD=67.2;  $t=2.4$ ,  $p=.02$ ), but not in the group with high social anxiety (Mean=28.7, SD=50.3 and Mean=1.2, SD=80.8 respectively;  $t=1.7$ ,  $p=.1$ ). Interestingly, the difference in the self-favoring-effect between the control and the socially anxious group did not hold for the explicit measures, and both groups showed higher positive and lower negative self than others image.

**Conclusions:** Results partially support previous findings and provide further evidence of a weakened implicit but not explicit self-favoring-effect in social anxiety.



## ACUTE PSYCHOSIS DUE TO ANTI-NMDA RECEPTOR ANTIBODIES AND TERATOMA: A CASE REPORT

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The diagnosis of a primary psychiatric disorder requires that a general medical condition be first excluded. This case supports the idea that the dysfunction of NMDA receptors may play a major role in psychiatric disorders, especially in psychosis and affective disorders.

Anti-NMDA-receptor encephalitis is a severe, treatable and potentially reversible disorder presenting with memory deficits and psychiatric symptoms.

The case is reported of a 17 years old lady with first onset desilusalional symptoms, hallucinations and depressive symptoms. Brain MRI showed abnormalities in hippocampus and left insula and CSF revealed nonspecific changes. EEG showed frontotemporal slowing.

Anti-NMDAR encephalitis should be considered in young individuals with subacute presentation of psychiatric symptoms, abnormal movements, and autonomic dysfunction. It should be considered in young individuals with subacute presentation of psychiatric symptoms, abnormal movements, and autonomic dysfunction.

Early recognition is crucial since prognosis largely depends on adequate immunotherapy and, in paraneoplastic cases, complete tumour removal.

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## SUICIDE AND MENTAL HEALTH CORRELATES OF BRAIN INJURY AMONG CANADIAN ADOLESCENTS

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**Objective:** We report lifetime traumatic brain injuries and adverse psychiatric conditions, bullying and suicide associated with TBI among adolescents from a population-based sample in Ontario.

**Method:** Data were derived from 4,736 surveys administered to adolescents in grades 7 through 12 as part of the 2013 population-based cross-sectional Ontario Student Drug Use and Health Survey (OSDUHS).

**Results:** Lifetime TBI was defined as head injury that resulted in being unconscious for at least 5 minutes or being retained in the hospital for at least one night, and was reported by 22.8% (95% CI: 20.3, 25.5) of students. When holding constant sex, grade, and complex sample design, students with TBI had significantly greater odds of reporting having seriously considered suicide (AOR=1.86), attempting suicide (AOR=3.41), seeking counselling through a crisis help-line (AOR=2.10), and being prescribed medication for anxiety (AOR=2.24), depression (AOR=2.38), or both (AOR=3.75), in the past 12 months. Moreover, students with TBI had higher odds of being victimized through bullying at school (AOR=1.97) compared with students who did not report TBI.

**Conclusions:** Significant associations between TBI and adverse internalizing and externalizing behaviours were found in this large population-based study of adolescents. Those who reported lifetime TBI were at a high risk for being prescribed medication for depression, anxiety or both, and also reporting bullying and suicide in the past year than peers who never had a head injury. Primary physicians should be vigilant and screen for potential mental health and behavioural harms in adolescent patients with TBI. Efforts to prevent TBI during adolescence and intervene at an early stage may reduce injuries and comorbid problems in this age group.

Table 1. Percentage of students with and without a lifetime TBI reporting emotional and mental health indicators (N=4736), 2011 OSDUHS.

Indicator	No TBI % (95% CI) (n=3714)	Lifetime TBI % (95% CI) (n=1022)	OR	95% CI	AOR	95% CI
Bullying	22.6 (20.5-24.9)	34.8 (29.6-40.4)	1.82***	1.45-2.29	1.95***	1.57-2.46
Suicide ideation	12 (10.1-14.1)	18.9 (15.4-23.0)	1.72***	1.28-2.30	1.86***	1.37-2.54
Suicide attempt	2.3 (1.7-3.2)	6.8 (4.4-10.3)	3.04***	1.78-5.19	3.41***	1.98-5.86
Was prescribed medicine to treat anxiety and depression	1.3 (0.7-2.4)	4.0 (2.4-6.8)	3.26*	1.35-7.85	3.75**	1.56-8.99
Was prescribed medicine to treat anxiety	1.6 (0.9-3.0)	3.0 (1.5-5.8)	1.99*	0.86-4.59	2.24**	0.97-5.18
Was prescribed medicine to treat depression	1.2 (0.8-1.9)	2.6 (1.3-5.4)	2.32*	0.97-5.55	2.38**	1-5.71

Notes: Unadjusted odds ratios (OR) and Adjusted Odds ratios (AOR) calculated in logistic regression models controlling for the effect of grade, sex and design; \*\*\*  $P < 0.001$ , \*\*  $P < 0.01$ , \*  $P < 0.05$ , 2 tail-tests.

## **DIAGNOSIS DIFFICULTY OF MANIC ACCESS IN ADOLESCENT (A CASE REPORT)**

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The "atypical" forms of manic In adolescents are frequent, combining The mood disorders , the psychotic symptoms , anxiety and confusion. These symptoms usually take center stage which makes the difference between bipolar and psychosis diagnosis particularly difficult. The case report illustrates the difficulty of deciding between the two diagnoses.

Mr. HK, 15yers old, was hospitalized for behavioral disorders . The onset of symptoms back to a week by the sudden outbreak of a psycho motor instability and mystical- religious delusions .The interview with the parents revealed that a months before, the patient became insomniac, he often got into fights with peers and at school his teachers complained about his behavior disorders. The diagnosis was manic episode, because the installation of excitation disorders was before psychotic symptoms. The patient was placed in mood regulator ( Valproate 1.5mg/day) and benzodiazepine ( diazepam 15mg /dam ) . The outcome was favorable .

The diagnosis difficulty of bipolar disorder in children and adolescents is reported by most studies . Psychotic symptoms are present in at least 50 % of cases. It is most often the thought and judgment disorders with delusions and auditory hallucinations congruent or not with mood. The "atypical" forms appear predominant in subjects with their troubles began before the age of 16yers , while the "pure" forms appear more frequently in subjects who started their troubles after this age.

The evaluate of mood state of children and adolescents is a necessity, especially during psychotic episodes . The diagnosis of mood disorders should be preferred when the symptoms appear atypical.

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## **HIGH FUNCTIONING AUTISM AND SUICIDE: A DANGEROUS COUPLE**

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### **Objectives**

Asperger syndrome is a specific developmental disorder that affects psychosocial adaptation, especially in the area of interpersonal relationships. Adolescence, in particular, is associated with intensive emotional experiences, which this patients are not sufficiently equipped to manage. Adolescents and adults with autism can develop depression, sometimes as a result of the realization that they are unable to overcome their social difficulties unaided. Suicidal thoughts very often occur in this individuals.

### **Methods**

Through a clinical case of a 14 year old boy, we want to underscore difficulties in managing suicidal ideation in patients diagnosed with High Functioning Autism, being unpredictable in many occasions.

### **Results**

We present our patient, a 14-year-old boy who suffered difficulties since early childhood. Difficulties characterized by problems in social interaction with their parents, delayed language acquisition and lack of interest in specific topics. In psychiatric screening since 7 years, there is a worsening in the last months regarding the rejection suffered by his peers at school. Moments of agitation increases until, faced with a minimum setback, he jumps down the stairwell of his home (14th floor). Fortunately he recovered from several bone fractures and is currently attending a specialized education center.

### **Conclusions**

The existence of suicidal ideas in this type of patients goes unnoticed in many cases, therefore it is necessary to improve diagnostic tools that favor the detection of its existence and also of other psychiatric comorbidities in this patient group to avoid devastating consequences.

## **IMPORTANCE OF EARLY DIAGNOSIS OF ENDOCRINOPATHIES IN CHILD MENTAL HEALTH: A CASE REPORT**

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### **Objectives:**

Highlight and consider the importance of early detection underlying endocrine problems in children, exposing the case of a patient of 11 years. After an evolution of 18 months, the patient was diagnosed of attention deficit hyperactivity disorder and anxiety, being treated with atomoxetine, after which presented tachycardia, finally proving that what underlaid the clinical picture was a hyperthyroidism.

### **Methods:**

Review of the pharmacological and clinical history of the patient, along with the observation of the clinical course of the same in a Child and Adolescent Mental Health Unit.

### **Results:**

After treating hyperthyroidism, clinical psicopathology disappeared, which consisted of call for attention behaviors, oversizing of abilities, irritability, unjustified mood changes, restlessness, distractibility, a speech centered in divine punishments and superpowers, hearing pseudohallucinations congruent with the actual mood and nightmares.

### **Conclusions:**

Changes in hormone levels may present with varying degrees of neuropsychiatric disorder, expressed in many ways. These include changes in personality, mental functions, memory, attention, and neurological abnormalities. In patients with overactive thyroid gland, psychological disorders in varying degrees are common: hyperactivity, restlessness and irritability are characteristic, as well as distractibility, emotional lability and behavioral disturbances in which conducts can be histrionic character.

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## **AUTISM SPECTRUM DISORDER PRESENTING TO AN ADULT PSYCHIATRY SERVICE AS AN OBSESSIVE-COMPULSIVE DISORDER: CASE REPORT AND REVIEW OF THE LITERATURE**

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**Objectives:** Neurodevelopmental disorders may remain unrecognized during childhood and present later to adult services. The authors aim to highlight the importance of recognising Autism Spectrum Disorders (ASD) in previously undiagnosed adults.

**Methods:** Case report of a 22 year old male diagnosed with Obsessive-Compulsive Disorder (OCD) since the age of 18. A thorough investigation of his developmental trajectory clearly pointed to an ASD. The authors searched the PubMed database with “autism”, “asperger”, “OCD”, “adult”, “comorbidity” as key words, and also relevant references of the articles thus obtained.

**Results:** Arranging and hoarding symptoms, such the ones this patient had, are frequently found in adults with ASD. In the absence of the ego-dystonic character that true obsessions and compulsions have, they should better be considered as part of the restricted, repetitive interests and patterns of behaviour and insistence on sameness of ASD. In this non-intellectually disabled individual, who did well in school, the almost complete lack of age-appropriate social interactions throughout his lifespan was never a matter of concern for his parents. The patient didn't respond to previous trials of antidepressants, and the cognitive-behavioural therapy was detrimental: when prevented from performing his rituals, he became aggressive and threw tantrums, resulting in frequent admissions to our inpatient ward. He scored 34 in the Autism Spectrum Quotient. His mother was subsequently interviewed with the ADI-R (SCORE PENDING). His behaviour improved with Risperidone, he was taught some basic social skills and low-level theory of mind tasks. He will benefit from being placed under protected employment, as he reacts poorly to unexpected changes.

**Conclusions:** Ego-syntonic OCD patients should be assessed for deficits in social interaction and social communication, including parent interviewing for past information, and given screening and diagnostic scales to assess for ASD, in order to make the appropriate treatment choices.

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## **TACKLING THE RISK OF SEXUAL BEHAVIORS IN ADOLESCENTS WITH MENTAL DISORDERS**

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**Objectives:** Risk sexual behaviors (defined and categorized in the presented paper) are common in developmental population with devastating consequences especially in clinical subpopulations. The noxious influences of such behaviors disturb not only somatic and psychological wellbeing but also damage personal development, family system, neighbourhood/social context and peer relations. The development of sexuality, saturated with dynamic cognitive, emotional and behavioral disorders exposes the child to the risk of sexual abuse; changes his/her mental activity and behaviors as well as parental and milieu's perception of the child. Risk sexual behaviors when misunderstood can lead to worsening of basic mental condition, primarily affected by mental disorder or intellectual disability.

**Methods:** The authors (child and adolescent psychiatrist and psychologist/sexologist) describe their experience in treating young people afflicted with some mental illnesses (Autistic Spectrum Disorders, schizophrenia, Bipolar Disorder, separation anxiety, depression, conduct disorder, oppositional-defiant disorder, ADHD, intellectual disability) and revealed risk sexual behaviors.

**Results:** The key clue ensuring optimal resolution is recommendation of systemic approach based on family and its resources. Psychotherapeutic work with parents aimed at proper understanding of sexuality of young people, natural way of psychosexual development and the meaning of psychopathological signs and symptoms and its interference as well as exploration of parental attitudes and patterns of their own sexuality are essential. The role of social context is worth pointing out - peer groups, school settings and environmental influences are considered with special emphasis to religious and mass culture surroundings.

**Conclusions:** The inalienable factor of such approach is psychopharmacological treatment, led according to psychiatric standards and individual necessities.

## **PROFILE DESCRIPTION AND DISTRIBUTION OF CHILD AND ADOLESCENT PATIENTS IN OUTPATIENT MENTAL HEALTH CONSULT.**

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### **Objectives :**

Given that one of the goals of healthcare system is to provide quality care that responds to the real needs of users, and that childhood is a time of especially plastic development, we consider interesting to analyze what are the features of needs in child and adolescent mental healthcare in our own network, describing the distribution of the most prevalent diseases in patients under 18 who care in a Community Mental Health Unit.

### **Methods:**

Observational descriptive crosssectional study, using for this information of a proprietary database, with a sample of 444 patients.

### **Results:**

There is an unequal gender distribution (36.94% of women compared to 63.06% of men attended), age (64.86% child between 3-10 years, 35.14% of adolescent aged 11-17 years), and by clinical syndromes, being the most prevalent emotional disorders started in childhood.

### **Conclusions:**

Although a significant number of child and adolescent patients served by psychiatric clinic, it is not worthy that a significant part of the consultations are due to non-pathological reasons, such as problems related to family circumstances, negative events or problems related to parenting.

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## **POLYABUSE DISORDER AND ITS RELATIONS WITH MALTREATMENT AND OTHER PSYCHOLOGICAL DISORDERS**

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**Objectives:** Environmental, genetic and psychological causes have been studied to influence drinking attitudes in adolescents, but one of the most studied relations between substance consumption and drinking motives is childhood maltreatment, that cause higher risks to develop an alcohol-use disorder and is directly linked to the development of many psychiatric diseases, affecting psychological and neuropsychological maturity of the abused or neglected individual. However, studying a single drug use is not always realistic, as a high proportion of adolescents consume regularly more than one substance; polydrug use combinations increase the risks and the possible damages to the adolescents and their environment. We aimed to study the polydrug use among adolescents and its relation with adverse experiences during childhood, presence of psychopathological conditions and familial history of alcoholism.

**Methods:** A clinical sample of 655 adolescents was divided into two groups: polyconsumers and non-polyconsumers. Assessments of substance use, maltreatment history, anxiety, depression and other positive psychiatric conditions are presented. A general model of logistic regression was performed in order to know the impact of every modulator variable into the pattern of polydrug use.

**Results:** Polyconsumers revealed more severe maltreatments, greater amount of psychiatric diagnoses and higher scores in depression and anxiety symptomatology. Depression doubled the risk for polyconsumption, and sexual abuse, emotional neglect and mother antecedents of alcoholism increased between 11 and 17-fold the odds for polyconsumption.

**Conclusions:** The alarmingly common pattern of polyconsumption among adolescents might be a symptom of an underlying psychopathological process. Teens showing a history of maltreatment, depressive and anxiety symptoms and familial antecedents of alcoholism are in high risk for polyconsumption. When we attend an adolescent showing problems with substance consumption, we should always seek further and look for emotional and psychopathological conditions that could be the cause of poly and abusive consumption.

## PROBLEMATIC INTERNET USE AMONG PATIENTS REFERRED INTO TWO ADOLESCENT PSYCHIATRY UNITS OF LISBON

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**Objectives:** The aim of the present study was to investigate problematic internet use among youngsters referred to psychiatry units for any reason.

**Methods:** The sample comprised 80 adolescents referred to two outpatient adolescent psychiatry units of Lisbon. Demographic items, Internet use habits, Internet Addiction Test, Symptom Check List 90 and MINI KID were administered. Prevalence of internet problematic use was assessed and we explored the clinical differences between the groups with high and low internet use as well as between the two centers.

**Results:** After controlling for the effects of demographic characteristics we found significant prevalence of problematic internet use in the sample of adolescents studied. No significant differences were found between centers. High and low internet use groups showed different patterns of psychopathology. Higher scores in internet addiction scale were positively correlated with higher psychopathology scores in general but no correlation was found with one particular psychiatric disorder.

**Conclusions:** Our study assessed the problematic internet utilization in a fairly representative sample of Adolescents of Lisbon with psychiatric referral. While the pathological status of this entity is still under discussion, this work supports many others that found high rate of psychopathology co-morbidities among problematic internet use subjects.

## **BEAR IN MIND PANDAS**

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### **Objectives**

We focus on the importance for psychiatrists to take into account the characteristics of Pediatric Autoimmune Neuropsychiatric Disorders Associated with Streptococcus infections “classic” criteria (PANDAS), be able to recognize and treat this disorder properly.

### **Methods**

We present a disabling, sudden onset Obsessive Compulsive Disorder case in an adolescent, where PANDAS classic criteria was met.

### **Results**

In our case, high doses of oral amoxiciline treatment in four cycles were more successful than psychopharmacological treatments. ASO levels showed a strong relationship with clinical impairment and subsequent improvement after antibiotic treatment. In a graphic, clinical impairment was strongly related to higher ASO level and better response to amoxiciline treatment and less response for psychofarmacologic treatment, whose adherence was not adequate for some periods of time.

### **Conclusions.**

We recommend requesting the streptococcal antibody test (Antistreptolysin O titer; ASO) in all cases where OCD symptoms and/or Tics appear in an unusual clinical pattern, either by sudden onset of symptoms or by severe impairment. From a clinical point of view, we think that PANDAS concept may be very useful. The proposal of other broader terms as Childhood Acute Neuropsychiatric Symptoms (CANS) could be made, as it seems to be more inclusive. In this sense, we should bear in mind that severe psychopathology in a child or an adolescent, could be related to *organic* treatable cause with better prognosis. Further clinical studies are required.

## **SUPPORT GROUP FOR PARENTS WITH CHILDREN WITH AUTISTIC SPECTRUM DISORDER**

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### Objetives

The impact of a diagnosis of Autistic Spectrum Disorder (ASD) is associated with higher level of stress in the family.

Support groups for parents with children with ASD can be helpful to deal with the emotional and practical difficulties associated with this diagnosis.

The objectives of this group are: 1) To obtain information about the difficulties of having a child with ASD; 2) To consider whether this intervention is helpful for parents whose child suffers from this diagnosis

### Methods

In our Child and Adolescent Mental Health Service, we started a support group for parents whose children have ASD. The group takes place every two weeks. It is an open group, without an agenda: parents bring into the session anything that they would like to share with other parents. The group is conducted by a child psychiatrist and a social worker.

Initially we contacted 25 families. Only 8 families attended regularly. In three families both parents attended. The rest were mothers alone.

### Results

The themes discussed in the sessions were:

- The difficulties to connect with the professionals involved in the care of their children. Most parents did not feel they were listened to by the professionals (doctors, teachers,...)
- The difficulties that their children had at primary/secondary school. They felt that most teachers did not have the specific training to deal with children with ASD.
- The difficulties that their children have to relate to others and the lack of support to deal with this problem at school.
- They talked about the lack of economical support and recognition of the disabilities of their children by the local or national authorities.

The group was very dynamic, with good cohesion. All parents felt very comfortable during the sessions.

### Conclusions

Support groups for parents whose children have ASD may be included in the individual care plan for these children. Parents may share and explore their feelings about having a disabled child with reduction in the levels of anxiety.

## **ANALYSIS OF THE KEY DIFFERENCES IN YOUNG-ADOLESCENT SUBJECTS TAKEN CARE OF BY THE PSYCHIATRY EMERGENCY DEPARTMENT OF A GENERAL HOSPITAL**

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**Objectives:** To analyze major significant differences according to age in subjects from child population who come to be diagnosed by the skilled practitioner in psychiatry in the emergency department of a general hospital.

**Methods:** Following the selection of subjects aged 17 or less who were seen in the service of our hospital during the period of one year, we had access to certificates of all-clear discharge of psychiatric emergencies and relevant information for the study was coded. To perform the analysis of the results, SPSS version 15.0 was used.

**Results:** The sample (N=57) consists of 66.7% women and 33.3% men. With an average age of 15.1 (D.T.: 1.63). The age range is at 9 and 17 years. To establish the differences, a separation was made between subjects who were younger than 16 on the one hand, and 16 or older on the other. In the first group, the most frequent diagnosis is major depressive disorder, while the second group corresponds to borderline personality traits. In both groups, the most frequent comorbidities are eating behavior disorder, major depressive disorder and conduct disorder. Regarding our focus of research, both groups present the same autolytic high frequency gesture followed by autolytic threats in 16 year-old teenagers, and eating toxic in 16 and 17 year-old subjects. In subjects aged 16 to 17, the average of emergency visits is higher, the percentage of admissions is lower and the average stay is shorter than in those under 16 years.

**Conclusions:** Particularly striking is the high frequency of emergency room care of major depressive disorder and higher limits of personality traits in young ages.

## **GENDER DIFFERENCES ANALYSIS IN A CHILDLIKE SAMPLE ATTENDED AT THE PSYCHIATRY URGENCY SERVICES OF A GENERAL HOSPITAL**

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**Objective:** To analyze the main significative differences between men and women from a infant sample, attended at the Psychiatry Urgency Services of a general hospital.

**Method:** After the subject selection among people younger than 17 years attended at the Urgency Services of our Hospital from a year period, we used the discharge reports to analyze the main information refered to each patient. The results were tested using the SPSS program, 15.0 version.

**Results:** The sample (N=57) was formed by 66.7% of women and 33.3% of men. The medium age was 15.1 (T.D: 1.63). the age range was 9 to 17 years. In the women group, the most frequent diagnosis was borderline personality disorder, while in the men group diagnoses were distributed between psychosis disorder, attention-deficit/hyperactivity disorder, eating disorder and patients without a diagnosys. Among women the most frequent comorbility was eating disorder and major depressive disorder, while men group was predominant in disruptive behavior disorder with drug abuse. Patients of our sample went to the hospital more frequently due to, in both cases, women and men, suicide attempt by pills intake. Double number of women were sent to an Ambulatory Service after the discharge at Urgency Services. In our sample, men needed more long-lasting hospitalization than women.

**Conclusion:** This study highlights that, despite that it is more frequent the presence of mental disorder at childhood in the masculine gender, the urgency attention is bigger for women.

## **INTRAFAMILY VIOLENCE AND MENTAL DISORDERS IN A CHILD-YOUTH POPULATION. OUTPATIENTS SERVICE OF THE DEPARTMENT OF PSYCHIATRY OF THE FACULTY OF MEDICAL SCIENCES OF THE NATIONAL UNIVERSITY OF ASUNCION (UNA), PARAGUAY**

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Violence is a world concern. Exposure during the childhood could affect the nervous system, cause social, emotional and cognitive disorders that could generate diseases, lesions and social problems.

**Objective:** To characterize intrafamily violence in a child-youth population between 3 and 18 years attending the Outpatient Service of the Department of Psychiatry of the Faculty of Medical Sciences.

**Methodology:** Cross-sectional descriptive study. A total of 163 clinical records of children and adolescents receiving psychotherapy at the Outpatients Service between 2010 and 2012 were analyzed. The SPSS 15.0 for Windows was used for data analysis and DSM-IV-TR to diagnose.

**Results:** The higher percentage, 37% (60), was found between 15 and 18 years; 14.7 % (24) suffered psychological violence, 10.4% (17) physical, 20.8% (34) physical and psychological, 5.5% (9) sexual abuse and 3.7% (6) a combination of the three kinds, 18.4% (30) no violence. Out of the total, 23.3% (38) presented Major Depressive Disorder, and 81.6% (31) with violence and 5.3% (2) no violence. Post-Traumatic Stress Disorder was diagnosed in 7.9% (13), 84.6% (11) with violence, 7.7% (1) without violence. 7.4% (12) had Negativistic Defiant Disorder, 41.7% (5) with violence, 33.3% (4) without violence. 4.3% (7) had Attention Deficit, 57.1% (4) with violence. 4.3% (7) was related to substances and 22.7% (37) had Diagnosis Postponed.

**Conclusions:** Most of this population was adolescent and a high percentage was victim of more than one form of violence, mainly with depressive disorder, post-traumatic stress, negativistic defiant disorder, substances-related disorder and attention deficit. Keywords: intrafamily violence-child-youth-associated factors.

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## **ENVIRONMENT OR GENETICS? – WHEN OBSESSION RUNS IN THE FAMILY**

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The authors pretend to discuss the influence of genetics and environmental factors in the development of Obsessive-Compulsive Disorder (OCD) in children.

We present a case report supported by some recent data on the subject.

Family aggregation studies have demonstrated that OCD is familial and results from twin studies demonstrate that the familiarity is due in part to genetic disposition. Moreover, some environmental factors seem to operate in addition and interaction with the genes, protecting against or exacerbating the manifestations of the disease.

F, 14 years old boy presenting with tics, anxiety, recurrent intrusive thoughts related to low self-esteem and inability of accomplishing some daily activities (eating, getting dressed, studying) accompanied by rituals. Diagnosed with OCD. Included in a nuclear family: anxious mother and intrusive and obsessive father. Paternal grandfather with OCD. Persistent parental conflict leading F. to feel permanently pressed to take a side. There is no space to take options and build his own opinions.

Genetics and environment contribute to the aetiology of OCD in children. The case we present illustrates the difficulty to identify each factor's influence.



## **LIKE A GHOST DRAMA. PSYCHOSIS VS SUGGESTIBILITY**

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### **Methods:**

This is the case of a 14 year old female who was referred for evaluation by anxiety disorders. Two weeks later the patient makes a drug binge. After the subsequent evaluation the mother reports that approximately since the patient was 2 years old "she sees things, she saw a man at her grandmother's house, said goodbye to him, we ignored that ... she has started again to tell us this kind of things since one year ago, she says she does not want us to tell this to anyone... her younger brother also says he sees his paternal grandfather and he has not heard his sister talk about this ... I have taken her to a naturist who has told us she has a special sensitivity. " The patient contextualizes the distress that led her to the drugs overdose "since age 10 I see people with details, with light, everywhere, in the hospital I see them even more, at home I see them less, sometimes on the streets, they talk to me but I try not to listen to them, they tell me things about people, I don't like to see them, they bother me... Here I do not see nor hear anything, ... ".

### **Results:**

At the time of sending the abstract the patient is in organic screening process.

### **Conclusions:**

Relying on the clinic referred by the girl we could find an early-onset psychosis. However, if we consider the symptoms described by the mother and the criteria of impossibility of onset of psychosis on patients younger than 5 years old, we might be inclined to a diagnosis based on suggestibility?

## **FACTORS ASSOCIATED WITH GROUP BULLYING AND PSYCHOPATHOLOGY IN ELEMENTARY SCHOOL STUDENTS USING CHILD WELFARE FACILITIES**

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### **Objectives**

Low socioeconomic status is an important risk factor for child psychiatric problems. We investigated the effects of group bullying on clinical characteristics and psychopathology in elementary school students using child welfare facilities.

### **Methods**

A total of 358 elementary school students using child welfare facilities were recruited. The School Bullying Self Rating Questionnaire was used to assess group bullying. To evaluate related psychopathology, Children Problem-Behavior Screening Questionnaire, Children's Depression Inventory, Beck Anxiety Inventory, Suicidal Ideation Questionnaire, Young's Internet Addiction Scale, and Conners-Wells' Adolescent Self-Report Scale were applied. Samples were classified according to school grade(lower or, upper), and characteristics of each group were compared between bully victims and non-victims.

### **Results**

The prevalence rate of group bullying was 22% in the lower grade group and 12% in the higher grade group. Bully victims in lower grades reported high somatization, depressive symptoms, internet addiction, and attention deficit hyperactivity disorder (ADHD) tendencies, whereas those in upper grades reported cognitive problems, depressive, and anxious symptoms, suicidal ideation, internet addiction, and ADHD tendencies. Somatization and depressive symptoms were significant predictors of bullying in the lower grade group, and anxiety was a significant predictor of bullying in the upper grade group.

### **Conclusions.**

The current study demonstrated that elementary school students using child welfare facilities may have an increased risk of being bullied and, that bully victims may have different psychopathologies depending on their age.

## **A STUDY OF COMORBID ANXIETY DISORDERS AND ANXIETY SYMPTOMS IN CHILDREN AND ADOLESCENTS WITH ATTENTION DEFICIT HYPERKINETIC DISORDER**

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**Objective:** The aim of our study was to assess the frequency and phenomenology of comorbid anxiety disorders and anxiety symptoms in children and adolescents with attention deficit hyperkinetic disorder (ADHD).

**Methods:** Patients between age group of 6 to 16 years attending child and adolescent psychiatry clinic with a diagnosis of ADHD were screened for anxiety disorders by Screen for child anxiety related emotional disorders (SCARED) scale. Screen positive patients for anxiety disorders were assessed for the phenomenology of anxiety disorders by using Kiddie – Schedule for Affective disorders and Schizophrenia– present and lifetime version (K-SADS-PL). Those patients having anxiety symptoms, but not fulfilling criteria for any anxiety disorder their phenomenology was assessed by SCARED scale.

**Results:** Out of the 60 patients with ADHD 8(13.33%) patients had anxiety disorders and 15 (25%) patients had anxiety symptoms, but not fulfilling criteria for any anxiety disorder. Out of the 8 patients with anxiety disorders 3(5%) patients had generalized anxiety disorder, 2 (3.33%) patients with social anxiety disorder, 1(1.66%) patient each with specific phobias, separation anxiety disorder and panic disorder. In patients with anxiety symptoms, but not fulfilling criteria for any anxiety disorder most common anxiety symptoms were feel nervous (11.66%), headache when at school(8.75%), worry about things already happened(6.2%), worry about going to school( 3.45%).

**Conclusion:** Anxiety associated with ADHD is a product of an inability to function in daily life because of social and cognitive limitations associated with ADHD, rather than typical phobic/fearful behavior. So early recognition and treatment of ADHD may itself improve anxiety. Because significant numbers of children with ADHD have or will develop anxiety, all children with ADHD have to be monitored for symptoms of anxiety.

## **PREVALENCE AND CORRELATES OF PTSD, DEPRESSION, AND SUICIDALITY IN JORDANIAN YOUTH IN INSTITUTIONAL CARE.**

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**Objectives:** Youth in residential care have been identified as having increased mental illness rates compared to community populations. Research examining mental illness and suicidality among youth in institutional care in the Middle East is lacking. This study examines the prevalence and correlates of depression, PTSD, and suicidality of youth residing in institutional care in Jordan.

**Methods:** Eighty-six youth, ages 7-18, residing in residential care across Jordan were interviewed for PTSD, depression, and suicidality using standardized instruments. Data was also collected from staff-caregivers and administrative files. Prevalence rates were examined using descriptive analyses. Logistic regressions were used to model suicidality across depression, PTSD, comorbid depression/PTSD, controlling for demographics, case history, youth self-beliefs, and social support factors.

**Results:** Institutionalized youth endorsed high rates of mental illness, with 45% experiencing depression, 24% PTSD, 17% comorbid depression/PTSD, and 27% suicidality. Controlling for characteristics in logistic regression models, depression was a marginally significant correlate ( $p=.058$ ), with the odds of suicidality for depressed youth 3.6 times higher. Reported abuse is a significant correlate of suicidality, with the odds of suicidality for abused youth four times higher.

**Conclusions:** Results parallel existing prevalence rates of institutionalized youth throughout the world. Although institutional care supports housing and material needs, there is a clear need for greater attention to mental health and psychosocial wellbeing. Elevated rates of mental illness and suicidality indicate the importance of addressing these needs within institutions and when aging out of institutions. Developing institutional and community-based programs that foster peer relationships is recommended for youth assessed with depression and/or PTSD, specifically within more collective-based societies.

## **ASSESSMENT OF ADOLESCENT MENTAL HEALTH AND BEHAVIORAL PROBLEMS IN INSTITUTIONAL CARE: DISCREPANCIES BETWEEN STAFF-REPORTED CBCL SCORES AND ADOLESCENT-REPORTED YSR SCORES.**

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**Objectives:** For children residing in institutions, staff act as primary caregivers and often provide assessment of child psychopathology. Minimal research exists on how and when staff-caregivers are best positioned to report on mental health. This research examined discrepancies between adolescent- and staff-reported psychopathology and whether variation between raters may be explained by demographic or relationship factors.

**Methods:** Interviews were conducted with 60 Jordanian adolescents (age 11-18) in residential care and their staff-caregivers. Difference scores were derived using data from the Youth Self-Report (YSR) and Child Behavior Checklist (CBCL): *standard scores* capture the difference between the level of problem severity endorsed; *dichotomized scores* indicate the difference in the number of problems endorsed. Discrepancies were examined using visual analysis, Pearson-correlations, and Kappa coefficients; associations with participant characteristics and relationship factors were examined using t-tests and ANOVAs.

**Results:** Small to modest correlations were found between YSR/CBCL scores. Adolescents endorsed higher standard scores indicating higher perceived severity in problems; dichotomized scores indicate that staff-caregivers recognized more overall problems. Relationship duration was associated with discrepancies, with greater agreement on endorsed items for internalizing problems when staff knew youth for over one-year. Adolescents endorsing high perceived closeness to staff showed less agreement on anxiety/depression symptoms. Staff-caregivers reporting high perceived fit with the youth displayed better agreement on total problems and externalizing problems.

**Conclusions:** Worldwide, staff are positioned to evaluate youth mental health for children in residential-settings. Although staff-caregivers recognize a higher number of problems than adolescents, staff appeared to perceive these problems as less severe. It is also possible that adolescents minimize minor problems until they become severe. Quality of the relationship appears to influence the quality of reporting; findings indicate staff-caregivers with high perceived fit are better able to approximate adolescent-reported psychopathology. Results indicate that staff-caregivers are able to identify child-endorsed psychopathology through the CBCL.

## VIDEO GAME USE AND CHILDREN'S MENTAL HEALTH

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**Objectives:** Recent data approach pathological video game use to other addictions, suggesting the possibility of a new psychiatric disorder within the category of addictive behaviors. The prevalence rate of this problematic in pediatric population is estimated around 8-12%. Frequently, it's associated to psychiatric co-morbidities, like mood disorders and ADHD (Attention-Deficit/Hyperactivity Disorder). We aim to characterize the pattern of video games use in a clinical sample of children aged 6-12 and its association with psychiatry co-morbidities.

**Methods:** Review and construction of video games' use questionnaires applicable to the children and their parents. Clinical sample selection by the convenience method. Questionnaires application (include the Strengths and Difficulties Questionnaire to evaluate global functioning). Clinical processes were checked for the psychiatric diagnosis and other relevant data. Descriptive analysis and correlation between variables (CI 95%,  $p < 0.05$ ).

**Results:** In our sample ( $n=58$ ), 31% were female and the mean age 9. On average children spent 1 hour playing video games and 2 hours watching TV per day. The global functioning, particularly in what regards social skills and behavior problems was correlated with the pattern of video games use ( $r_s = 0,295$ ,  $p < 0,05$ ). One third of the children had excessive use of video games. In this group the most common diagnosis was ADHD. Many children played video games for adults.

**Conclusions:** Further research should be undertaken in order to establish consistent diagnostic criteria of the video games pathological use in children. This issue should be evaluated in children psychiatric consultation and discussed with parents, mainly in the presence of the characteristic profile.

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## **SOTO`S SYNDROME AND ITS PSYCHIATRIC FEATURES: A CASE SERIES**

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### **Introduction**

Soto`s Syndrome (SS), also known as cerebral gigantism, is a genetic disorder caused in most cases by mutations in NSD1 gene. Over 90% of patients present its three cardinal features: a dysmorphic face (macrocrania with dolichocephalic head and broad prominent forehead, hypertelorism, prominent jaw, high arched palate), cognitive impairment and overgrowth. The association of SS and behavioural problems has been described and can range from autistic spectrum disorder, phobias and aggressiveness.

The purpose of this case series is to explore the spectrum of behavioural problems and cognitive impairment presented by patients.

### **Case report**

We report three clinical cases of children with SS, two of which have a positive genetic diagnosis for a NSD1 mutation. They all present the cardinal features of the disease.

Case 1: 5-year-old girl with hypotonia, global psychomotor development delay, emotional instability and anxiety with episodes of aggressiveness to others and self-harm.

Case 2: 16-years-old boy with a global development as expected, dyslexia but normal schooling, severe anxiety disorder with episodes of suicidal ideation and behaviours of opposition and self-harm.

Case 3: 11-year-old boy with global psychomotor development delay, attention deficit, multiple phobias and aggressiveness towards others.

All are followed in outpatient consults of psychiatry, psychology and speech therapy.

### **Discussion / conclusion**

The association of the SS and psychiatric problems is known and often involves episodes of aggression and low tolerance to frustration, as in the presented cases. Depression, anxiety and low self-esteem may arise and we relate it to the recognition of their cognitive limitations and differences when comparing themselves with their peers. Cognitive impairment may be very variable (from mild to severe) as illustrated by these three cases.

## **PSYCHIATRIC COMORBIDITIES FROM PATIENTS WITH LANGUAGE DISORDERS ATTENDING OUTPATIENT SPEECH THERAPY FROM CENTRAL MILITARY HOSPITAL BOGOTA, COLOMBIA, SOUTH AMERICA**

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**OBJECTIVE:** To describe the psychiatric comorbidities of children with language disorders treated at the outpatient Fonoaudiología Central Military Hospital in Bogota, Colombia, South America.

**MATERIALS AND METHODS:** Descriptive, cross-sectional. Statistical techniques: Revised and database against original records (formats) are purged. Information was tabulated in a database in Excel and drove in SPSS version available in the El Bosque University.

**RESULTS:** This research was made possible by the collaboration of all patients attending outpatient Fonoaudiología the Hospital Militar Central, of which 23 patients were withdrawn because of the exclusion criteria, of these, more than half (54 %) by a history of recurrent acute otitis media (54%). Other diagnoses cause of withdrawal were: mental retardation (16%), pervasive developmental disorder (12%), epilepsy (seven percent) and cerebral palsy (seven percent). It is difficult to extrapolate to the Colombian population information obtained as patients attending the Hospital Militar Central are part of a population with a special regime on Health which is a captive population, most socioeconomic three match Army (possibly because other forces are treated in their own clinics), despite these limitations it is noteworthy that as far as the author reviewed found similar work in Colombia.

**CONCLUSION:** The number of patients was small but enough despite being a census study. We need prospective studies for several years where you can show a longitudinally comorbid language disorder. The information was obtained from various sources such as medical history of different services and interview the guardian to reduce recall bias. It is the first study to Colombian level and one of the first in Latin America.

**Keywords:** Language disorders, Psychiatric Comorbidities, Children.



## **TIMING, CHRONICITY AND SEVERITY OF MATERNAL DEPRESSIVE SYMPTOMS AND CHILDREN'S BEHAVIOR AT AGE FIVE: THE EDEN MOTHER-CHILD COHORT**

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### **Objectives**

Maternal depression is detrimental to children's emotional and behavioral development. However, it is not clear whether outcomes for children vary depending on timing and the chronicity of maternal depression. The aim of this study was to examine the relationship between trajectories of maternal depressive symptoms from pregnancy to five years later and children's behavior at age 5 years.

### **Methods**

We used data from 1183 mother-child pairs participating in the EDEN study, a mother-child birth cohort study conducted in France. Trajectories of maternal depressive symptoms, measured by the CESD and EPDS scales, were modeled using a group-based method. Children's emotional and behavioral problems at age five were assessed using the Strengths and Difficulties Questionnaire (SDQ). The association between maternal depression trajectories and SDQ scores were examined by a series of multiple regression models.

### **Results**

We identified five trajectories of maternal depressive symptoms from pregnancy onwards: no symptoms (62.0%); high symptoms in pregnancy (3.6%); intermediate-level symptoms (25.3%); high symptoms during the child's preschool period (4.6%); and persistently high symptoms (4.6%). Children whose mother was depressed during pregnancy did not show higher levels of behavioral difficulties than children whose mothers were never depressed. Children whose mothers had persistent depressive symptoms – either intermediate or high – or depression during the preschool period were more likely to have high levels of internalizing, externalizing and peer relation problems.

### **Conclusions**

The pattern of maternal depressive symptoms is related to different outcomes of child problem behavior. A chronic course of depression is associated with an accumulation of child behavior problems, even when symptom levels are below clinical level. While timing of maternal depression seems less important than chronicity, the child's preschool period may be most sensitive in terms of influence on the child's behavior, suggesting the relevance of a specific focus on children in this age range.

## **OROFACIAL BEHAVIORS IN CHILDREN AND ADOLESCENTS WITH OBSESSIVE-COMPULSIVE DISORDER**

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**Introduction:** Obsessive-compulsive disorder (OCD) is characterized by the recurring presence of thoughts and/or compulsive acts that may seriously interfere with the patient's functioning. It affects about 2% of children and adolescents.

**Aims:** The aim of this study was to identify the orofacial manifestations in a population of children and adolescents diagnosed with OCD and to propose a method of investigation and evaluation of these manifestations.

**Methods:** Patients were evaluated with the following questionnaires: Dentistry Questionnaire of OCD Orofacial Manifestations (Dental Team, Department of Psychiatry, FMUSP); Dentistry questionnaire, decayed, missing and filled teeth, according to World Health Organization (DMFT), Yale Global Tic Severity Scale and Children's Yale-Brown Obsessive Compulsive Scale.

**Results:** Fifty-two patients were evaluated, 27 male. The mean age was 12 years. 94% of patients had at least one orofacial manifestation. All behaviors assessed were performed by at least one patient. The most prevalent behaviors were nail biting (58%); thumb sucking (40%); biting lips (38%); making noises with the mouth (33%); disgust with his own mouth (31%); making faces (29%); rhythmic teeth chitter (27%).

**Conclusion:** According to these preliminary data, 94% of patients had at least one oral manifestation of OCD. This high prevalence suggests that the dentistry professionals should be alert when treating children and adolescents with OCD, once these behaviors may play a negative role in the outcome of the dental treatment.

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## **CLINICAL CHARACTERISTICS AND SHORT-TERM OUTCOME OF CHILDREN PRESENTING WITH HISTORY OF CHILD SEXUAL ABUSE TO A TERTIARY CARE CENTRE IN INDIA**

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**Objectives:** The experience of having been sexually abused is associated with a wide range of psychiatric symptoms and difficulties, and these problems can persist over years. This study aims to study the socio-demographic, clinical features and short term outcome of children and adolescents with a history of Child Sexual Abuse (CSA).

**Method:** A chart review of 40 children and adolescents (<16 years) with history of CSA evaluated at the Department of Child and Adolescent Psychiatry of NIMHANS during the period of January 2011- October 2013 was performed.

**Results:** 85 % were female and 65 % belonged to the Lower Socio Economic Class. The most common form of abuse was contact penetrative abuse (65%) followed by non-contact penetrative abuse (32.5%) and non-contact non penetrative abuse (2.5%). 75% (N=30) had a psychiatric diagnosis at baseline. 50% of these children had one or more psychiatric comorbidities. Anxiety disorder was the most common diagnosis (27.5%) which included PTSD (11%) followed by Depressive disorder (25.2%). Children abused by multiple perpetrators were found to be more likely to have depression, to having a comorbid psychiatric disorder and more prone to exhibit sexualised behaviour. Children who also experienced physical violence at home were more likely to develop psychiatric illness following child sexual abuse. 35% of children received medication and 60% of children received psychotherapeutic intervention. All of the children who came for follow up showed improvement on Clinical Global Impression Scale at 8 weeks, irrespective of the severity of the abuse.

**Conclusion:** Psychiatric morbidity is high in clinic population of children with history of CSA. With interventions, the short term outcome in these children seems to be largely favourable in terms of global functioning. It is important to increase the awareness regarding the potential consequences of CSA in order to increase help seeking.

# **SALUD MENTAL Y PROTECCIÓN DE LA INFANCIA: DESARROLLO EVOLUTIVO Y ACOGIMIENTO FAMILIAR DE MENORES EN FAMILIA AJENA.**

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## **Objetivos**

- Visibilizar el beneficio que el Acogimiento Familiar reporta al desarrollo evolutivo del menor.
- Sensibilizar sobre la importancia de los programas de Acogimiento Familiar.
- Subrayar el papel de la atención profesional especializada.

## **Método**

Revisión del rol que ejercen las medidas de Acogimiento Familiar en términos de Salud Mental y Desarrollo Evolutivo del menor en contextos familiares de riesgo.

## **Resultados**

El Acogimiento Familiar consiste en la convivencia de un menor, en situación previa de desamparo, con una familia diferente a la de origen, de forma temporal o indefinida, de modo que se le ofrece un entorno favorable en el que crecer y desarrollarse de manera óptima. En palabras del Presidente de la Asociación para la promoción del Acogimiento Familiar en Andalucía (APRAF-A), García Molina J.A: “*en la intervención con la infancia hay que priorizar la integración familiar por encima de otra modalidad de agrupación socializadora*”. Aunque en nuestro país no contamos con una verdadera cultura de Acogimiento Familiar, el actual marco social contribuye a que el acogimiento en familia ajena se encuentre en un momento de creciente expansión.

## **Conclusiones**

El Acogimiento Familiar favorece la adecuada Salud Mental de los menores procedentes de contextos familiares de riesgo, promueve su autonomía y la responsabilidad con la sociedad. Existen problemáticas heterogéneas derivadas de la exposición de los menores a dichos contextos (retraso madurativo, trastornos de conducta, de la alimentación, ansiedad, etc.). En la investigación realizada por Fernández del Valle et al. (2008) se arroja que, en torno al 58% de la muestra utilizada en su estudio, el acogimiento es valorado como *exitoso* en relación a la consecución de logros (área de salud, área escolar, comportamiento); un 25% se valora haber alcanzado *algunos logros*; sólo un 6% señala *graves problemas*. El Acogimiento Familiar se erige como una medida fundamental y eficaz en términos de coste-beneficio.

**”GRUPO DE ENCUENTROS EDUCATIVOS PARA PADRES DE ADOLESCENTES EN LA COMUNIDAD”. Crecimiento Personal investigación-acción.**

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La Organización Panamericana de la Salud ha dado prioridad a la salud de adolescentes y jóvenes, desarrollando en numerosos países diversidad de programas para éstos, como los de México y Colombia, entre otros muchos, dirigidos a sus conflictos, necesidades y problemas, así como a las familias, con temas alrededor de esta etapa de la vida.

Se reconoce la necesidad de mejorar el conocimiento sobre salud reproductora en estas edades, como parte de su salud integral, teniendo en cuenta que la educación sexual es un comportamiento básico en la educación familiar, ya que es la familia donde los hijos aprenden una serie de valores y normas que condicionan actitudes referidas a la sexualidad; las actitudes, comportamientos y conocimientos de padres y adultos ante su propia vida influyen en la de sus hijos.

La sexualidad es inherente a la condición humana, por eso su espacio no es exclusivo en el sujeto o la pareja, sino también en la familia, en la escuela y en toda la relación social.

Los padres presentan dificultades en el manejo y comprensión del crecimiento y desprendimiento de sus hijos ya que generalmente no se les prepara y carecen de conocimientos y formación que les permita orientar, a través de una comunicación correcta y adecuada, soluciones y mecanismos sanos, afectivos y educativos, que faciliten un crecimiento adolescente, dentro y fuera del hogar, con amor, comprensión y armonía.

En la Comunidad de Arroyo Naranjo encontramos esta problemática con relación al manejo de los hijos. A través del Médico de la Familia se dispensarizan casos de adolescentes con actitudes y comportamientos inadecuados, casos de violencia hacia los hijos por situaciones que son propias de la edad, conflictos en los barrios y en las escuelas con las madres y padres a los que les resulta difícil el manejo de estas edades. Todo lo anterior constituye una preocupación que solucionar por parte del equipo básico de trabajo, junto a otros profesionales consultantes de la Comunidad.

Asimismo, la Federación de Mujeres Cubanas, desde su misma creación, dio prioridad a la salud de adolescentes y jóvenes, dentro del ámbito de su labor educativa en la mujer y la familia. Nuestro Centro ha realizado múltiples trabajos, en estrecha coordinación con esta organización, dirigidos a la problemática adolescente: sus conflictos, necesidades e intereses, así como a las familias, con temas alrededor de esta etapa de la vida.

De acuerdo a lo anteriormente expresado se hizo necesario desarrollar un programa de intervención con la familia, en especial con los padres. A ese fin encaminamos nuestro trabajo investigativo.

El presente estudio fue dirigido primero al diagnóstico de los problemas existentes en la comunidad objeto de estudio, en este caso el Reparto Parcelación Moderna en nuestro Municipio de Arroyo Naranjo, y después a la aplicación del programa educativo resultante que trató de articular, de modo interdisciplinario, los conocimientos de sexualidad, cuerpo y violencia, integrándolos con la problemática de la familia, además de capacitar a los médicos que los atienden en la comunidad, para que en un momento dado puedan asumir la tarea.

## **FAMILY FUNCTIONING PROFILE IN NEURODEVELOPMENTAL DISORDERS**

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**Objectives:** The main purpose of the present study is to explore the relationship between children's neurodevelopmental disorders and the way their families function. We aimed to distinguish between healthy and unhealthy family functioning, to evaluate specific domains of functioning and to compare these characteristics to those of families having children with no manifest mental suffering.

**Methods:** The sample consists of a clinical group, including 100 parents (both mothers and fathers) of 50 children diagnosed with a neurodevelopmental disorder and a control group of 100 parents of 50 typically developing children (matched for the child's age and parental education). A Romanian adaptation of the Family Assessment Device (a 60-item self-report questionnaire) was used to measure family functioning in both groups.

**Results:** Almost two-thirds of parents in the clinical group indicated an unhealthy General Functioning, exceeding the cut-off of 2.0. The scores in the psychiatric group were significantly higher than those in the control group for all the functioning dimensions. A moderate, positive correlation between mother- and father- reports was observed in both groups.

**Conclusions.** Families having a child with a neurodevelopmental disorder are more likely to have an impaired functioning. Whether this pathological functioning is a contributing factor to the development and the maintenance of the child mental disorder, or is merely an adverse consequence of it, if omitted or underestimated, it will certainly negatively impact the prognosis and the evolution of the disorder.

## **CALLOUS-UNEMOTIONAL TRAITS AND PARENTING: A RELATIONSHIP?**

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**Objectives:** Recent research has suggested that the presence of significant levels of callous-unemotional (CU) traits designates a clinically important and etiologically distinct subgroup of children and adolescents with serious conduct problems. In this review, we attempt to assess the influence of parent-child attachment and parenting practices in the development of these traits in children with conduct problems, as well as the role of parenting-focused interventions in reducing the levels of CU traits in youth.

**Methods:** Searches were undertaken in PubMed, EMBASE and B-On, using keywords such as 'callous-unemotional', 'conduct problems', 'antisocial behavior', 'parenting' and 'attachment'.

**Results:** Current findings in literature show that, independent of severity of conduct problems, high levels of CU traits are associated with more insecure attachment, specifically disorganized attachment. Results also indicate that low maternal care is significantly associated with greater total CU traits and uncaring and callousness dimensions. Research evidence suggests that dimensions of parenting are prospectively related to changes in CU traits. Subgroups of youth with both high levels of CU traits and antisocial behavior appear to have experienced negative parenting practices. Specifically, dimensions of harsh parenting, but not positive parenting, contribute to the development of CU behavior. At the same time, parenting-focused interventions appear effective in reducing the level of antisocial behavior and CU traits in youth.

**Conclusions:** A growing body of research suggests that, among conduct-problem children, those higher on CU traits appear to be at increased risk of experiencing disruptions in parent-child attachment relationships. Dysfunctional parenting is another factor that has been consistently associated with the development and stability of these traits. Attachment and parenting-focused strategies may be an important area of treatment and prevention efforts for CU traits.

## **THE CHILD IS FATHER OF THE MAN**

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“The Child is father of the Man,” thus goes a famous line in William Wordsworth’s celebrated poem, “My Heart Leaps up when I Behold.” It is not that a child gives birth to an adult, as is obvious, but that events in childhood shape adulthood, the adult personality; its worldview, its emotions, interpersonal relationships and – unfortunately – its pathology.

There has been an on-going controversy between the roles of nature versus nurture in the development of personality. The *tabula rasa* theory maintains that the child’s mind is like a blank slate on which experience writes the personality. On the other hand, the epigenetic model says that the personality and its pathology are already pre-conditioned, but they unravel in the due course, like the unpeeling of an onion, or blossoming of a flower. Our own Hindu concepts have many things to add to this. Our *sanskara* theory says that everything is important and contributes to the personality. In a way, it can be viewed as a holistic theory of genetics.

### **Childhood shapes adulthood.**

One important contribution of modern research into child development has been an understanding into the role of childhood in shaping adult personality. Childhood is the most impressionable phase of life. The role of abuses of various types in childhood in leading to adult pathology has been largely debated and researched. Reports of abuse by children are often doubted as are its impact.

Although we may differ and disagree in how much childhood shapes adulthood, there is no doubt that the first five or so years of life are more important than any other five years of life. Early events have a more long-lasting impact on the future personality. At the same time, the childhood personality is a harbinger, a precursor, of the adult personality.



## **ANALYSIS OF GENDER AND FAMILY SOCIAL SITUATION IN OBSESSIVE-COMPULSIVE DISORDER, DEPRESSION AND SEPARATION ANXIETY IN A COMMUNITY SAMPLE MADE OF CHILDREN AND ADOLESCENTS**

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**Objectives:** Detect the possible presence of Obsessive Compulsive Disorder (OCD), major depressive disorder (MDD) and Separation Anxiety Disorder (SAD) in pediatric population by administering specific questionnaires. Observe whether there are differences in these disorders attending to the variables: age, gender, population and parents status.

**Method:** Sample of 573 children and adolescents from Murcia (Spain), with age range: 8-16 years (Mean: 12.36, DT: 1.83). 52.2% men and 47.8% women. Consent was sought from the schools and parents of students.

**Results:** With respect to OCD, those who are repeaters subjects, living in rural areas and who are children from single parent, score higher.

In relation to MDD, women, repeaters subjects and those living in rural areas, present greater dysphoria and lower self-esteem. Regarding the situation of the parents, it is noticeable that children whose parents are separated present greater dysphoria and those whose parents widowed present lower self-esteem.

As for SAD, major signs and symptoms of this disorder can be seen among women, repeaters, rural population, and widowed parents.

**Conclusions:** Regarding gender, girls score higher on obsessions, MDD and SAD, while boys have greater severity in their compulsions.

In relation to parental status, children with separated parents are those with greater dysphoria, in single-parent family there are more cases of OCD symptoms and in those families with widowed parents there is a higher SAD and lower self-esteem among the children observed.

## **STUDY ON INDICATORS FOR EXTRACTING CHILDREN AT HIGH RISK FOR DEVELOPMENTAL DISORDERS IN CHILDHOOD**

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### **Objectives**

Behavioral disorders in children are non-specific and are often difficult to discover and diagnose in a single visit. With the need to confirm a diagnosis while following up with high-risk children, it is important to properly establish indicators regarding what kinds of children require follow-up as high-risk children.

### **Methods**

Subjects were 577 children who received a check-up for five-year-olds in Kanie Town in Japan's Aichi Prefecture. The five-year-old check-up is an assessment based on developmental tests, behavioral observation, and examination by a child psychiatrist in which high-risk children who may have a developmental disorder receive continuous follow-up using developmental consultation, periodic guidance for the kindergarten, and group rehabilitation, with diagnosis taking place at the time of enrollment. A logistic regression analysis was used to investigate the relationship between the results and a questionnaire (The Strengths and Difficulties Questionnaire [SDQ]) filled out by guardians at the five-year-old check-up.

### **Results**

Out of 577 children who had the check-up, 140 required follow-up. Ultimately, 34 were diagnosed with ADHD, and 16, with PDD. The total difficulties score of the SDQ showed significant correlations with developmental disorders overall and the respective diagnoses. As for the SDQ sub-items, a significant association was observed between ADHD and conduct problems and hyperactivity/inattention and between PDD and peer relationship problems and hyperactivity/inattention.

### **Conclusions**

An association was noted between the behavioral assessment based on the guardian's evaluation questionnaire at the age of five and the diagnosis of developmental disorder upon enrollment. The related sub-items were found to vary depending on the type of disorders. Results suggest the possibility that high-risk children can be extracted using a simple questionnaire.

## SELF-CONCEPT IN ADOLESCENTS WITH DIABETES TYPE 1: ITS IMPACT IN ADHERENCE TO THE TREATMENT

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**Objectives:** Diabetes Type 1 is a chronic disease that is difficult to control specially during adolescence. It can have impact on adherence to the treatment and well being. Its impact on self-concept is not sufficiently explored.

The primary objective of this study was to assess self-concept in a group of adolescents with type 1 diabetes, and to analyze the impact of self-concept on adherence to treatment. The secondary objective was to assess the impact of familiar, demographic and diabetes-specific variables on adolescent self-concept.

**Methods:** A convenience adolescents sampling (14 girls and 18 boys) with diabetes type 1, 14,1 ±2,3 years of age on average, participated in this study. A questionnaire with socio-demographic and health variables was applied. The self-concept was assessed through the Portuguese version of the Piers-Harris Children's Self-Concept Scale (PHCSCS-2; Piers & Herzberg, 2002). The adherence to treatment of DM1 was assessed by the evaluation of glycaemic control through HbA<sub>1c</sub> measurements.

**Results:** The results indicate that, even though adolescents with diabetes type 1 tend to have a lower global self-concept than adolescent without diabetes type 1 (sample of the PHCSCS-2 Portuguese adaptation) these differences are of no statistical significance. Furthermore there were no differences regarding subscales, except at the domain *Intellectual and School Status*. In this subscale, female with diabetes type 1 did report better scores ( $P<0,05$ ).

A significant negative correlation was found between global self-concept and glycaemic control. No more significant correlations were found among the self-concept and age, sex, family income, age at diagnosis and duration of disease.

**Conclusions:** Although no differences between the self-concept of healthy and diabetic adolescents were seen, a better self-concept was associated to a better adherence to treatment with good metabolic control. Therefore, interdisciplinary interventions including mental health professionals aimed at improving adolescent self-concept may have a positive impact on diabetes treatment by improving adherence to treatment.

## **EARLY ONSET SCHIZOPHRENIA: COMORBIDITY WITH DEVELOPMENTAL DISORDERS OR EVOLUTION?**

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**Objectives:** Schizophrenia has been identified in children since early in the 20th century. Schizophrenia occurring prior to age 17 is considered early-onset schizophrenia (EOS). Early intervention has been proved to improve the outcome. Diagnostic criteria are the same for children and adults, including positive psychotic symptoms as well as negative ones.

**Methods:** a 15 year old patient with auditory hallucinations and disorganized speech as well as inappropriate affect and lack of social skills was admitted to the Psychiatric Unit. He had had a personal history of behavioral problems and had suffered from bullying at school; he was given Risperidone. Blood analyses and MRI were absolutely normal.

**Results:** after 48 hours the hallucinations disappeared; in one week, the patient was discharge from the hospital. He came to a visit after 10 days and was asymptomatic. After a few weeks, the positive symptomatology reappeared and the patient was admitted again. There were no substance abuse nor the patient had quit from the antipsychotic medication. He had hallucinations and formal thought disorder.

**Conclusions.** It would not be accurate if we say the patient had had any syndrome before this crisis, as we hadn't met him before, but the previous history we were told by him and his family made us thinking about characteristics of pervasive developmental disorders (PDD). We wonder if the premorbid characteristics in this patient were or not part of a PDD; we still don't know is these acute episodes are the beginning of a schizophrenic syndrom. Time will tell.

## **FAMILY STRUCTURE AND CHILD INTERNALIZING AND EXTERNALIZING DISORDERS AMONG PUERTO RICAN CHILDREN: A BINATIONAL STUDY**

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**OBJECTIVE:** To analyze if different family structures are associated with psychiatric disorders in children.

**METHODS:** Sample: Probability samples of children in the South Bronx (SB), New York and in San Juan, Puerto Rico (PR) (N=2,142) assessed yearly 3 times. Measures: Children's family structure: a) married biological-parents, b) cohabiting biological-parents, c) single-parent d) single-parent and extended family d) married step-parent, e) cohabiting step-parent. Youth psychiatric disorders (internalizing and externalizing) were assessed with the Diagnostic Interview Schedule for Children (DISC-IV). Data Analysis: Logistic regression was carried out relating the likelihood of a disorder (Internalizing/Externalizing) to family structure for each wave by site adjusting for potential confounders as demographics and parent characteristics (parental psychopathology, support, familism, warmth, discipline and monitoring). Household fixed-effects models were estimated using SAS 9.3.

**RESULTS:** In PR, there were statistically adjusted associations between being a single-parent (w1), being single with extended family (w2) and higher likelihood of internalizing disorders (AOR: 2.54, CI 95%:1.20-5.38, p.015 and AOR: 6.31, CI 95%: 1.70-23.46, p.006); and between being in a single-parent family with extended family (w1) and being in a married-step family (w1) and higher likelihood of externalizing disorders (AOR: 4.37, CI 95%: 1.51-12.71, p.007 and AOR: 1.82, CI 95%: .99-3.35, p.056). In SB there were only statistically adjusted associations between being a single-parent (w1 and w2), being in a married-step family (w1 and w2) and higher likelihood of externalizing disorders (AOR: 3.16, CI 95%: .99-10.07, p.0.52; AOR: 3.07, CI 95%: 1.16-8.08, p. 024; AOR: 4.87, CI 95%: 1.33-17.82, p.017; AOR: 4.31, CI 95%: 1.56-11.87, p.005).

**CONCLUSIONS:** Being single or in a step-parent household shapes the likelihood of having a psychological disorder. Cohabiting is a common family structure in Puerto Rican population, and we found no significant differences with their married counterparts. Implications for interventions are discussed.

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## **CROSS-SECTIONAL STUDY OF THE UNDIAGNOSED POPULATION OF PERVASIVE DEVELOPMENTAL DISORDER IN THE MENTAL HEALTH UNIT OF CHUC**

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### **Introduction**

The Pervasive Developmental Disorder (PDD) includes one of the most important signs of psychopathology of childhood. It involves some types of disorders, like: autism, Asperger syndrome, Rett syndrome, childhood disintegrative disorder and pervasive developmental disorder unspecified. In his etiology are involved many different factors. At the same time, it has a lot of different levels of severity. Nowadays. The diagnosis is based on clinical criterias that can be found collected in evaluative classifications. These can be used to identify PDD. Frequently, serious disorders appears and there isn't any autoregulation or behavioural inhibition. Because of that, it requires psychopharmacological Treatment. At the same time, the enquiry to the parents, special education and and education based on sensory integration, have achieved positive effects.

### **Hypothesis/Ojectives**

We will do an unicentric, retrospective and descriptive study of the entire population with PDD in the *Hospital Universitario de Canarias*.

### **Material and methods**

It will be a review of medical records, where the start of control unit, the presence of comorbidities and other psychopharmacological treatments and social and educational interventions will be valued.

### **Statistical analysis**

It will be a descriptive analysis of all the variables at the beginning of study. Those variables continuous are expressed as mean and standard deviation; qualitative in absolute frequencies, percentages and proportions. A significance level of at least 0.05 for all testing shall be considered.

### **Conclusions**

PDD is a serious condition that need a multimodal intervention. The prognosis will be better as earlier it has.

## COMPORTAMENTOS HOSTIS EM ADOLESCENTES E PARENTALIDADE

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Os Comportamentos Hostis em adolescentes são uma realidade crescente no Mundo, sendo o estudo desta problemática fundamental para a melhoria da qualidade de vida dos adolescentes. Vários estudos epidemiológicos têm demonstrado que a relação parental é de primordial importância para o completo desenvolvimento do indivíduo ao longo da vida.

**Objetivos:** Identificar as variáveis sociodemográfico e de contexto familiar que têm efeito significativo nos comportamentos hostis dos adolescentes; Analisar a influencia da percepção face ao comportamento parental e do conflito parental nos comportamentos hostis em adolescentes quando mediada pela segurança emocional, são os objetivos deste estudo.

**Métodos:** Estudo quantitativo, transversal, descritivo e analítico, envolvendo uma amostra de 1890 adolescentes (idade  $\bar{x}$ =16,26 anos; Dp=1,02 anos). A recolha de dados inclui: Questionário (Dados Pessoais, Sociodemográficos e Contexto Familiar); Escalas: Inventário da Percepção Face ao Comportamento Parental; Escala de Percepção ao Conflito Interparental; Escala da Segurança Emocional no Subsistema Parental; Inventário de Hostilidade de Buss-Durkee.

**Resultados:** O comportamento Hostil em adolescentes associa-se transversalmente com as variáveis sociodemográficas, de contexto familiar e de relação parental. A Percepção inadequada dos adolescentes face ao Comportamento Parental situa-se nos adolescentes mais velhos (39.2%). A Percepção do Conflito interparental (global) nos adolescentes até aos 16 anos ( $p=0,017$ ). Quanto maior a Percepção face ao Comportamento Parental, menor a Percepção face ao Conflito interparental e Segurança Emocional maior o Comportamento Hostil em Adolescentes.

**Conclusões:** Confrontar Pais, Estudantes e Professores com os resultados da investigação e desenvolver estratégias de intervenção em contexto escolar, discutidas com os diretores das escolas, professores, pais e alunos no sentido de prevenirmos escalada de Comportamentos Hostis em adolescentes.

## QUALITY OF LIFE IN ADOLESCENTS WITH INFLAMMATORY BOWEL DISEASE

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**Objectives** Inflammatory bowel diseases (IBD) are chronic illnesses with an impact on quality of life (QoL). The aim of this study is to examine the QoL of children with IBD and their families, depressivity and anxiety in both the children and the parents, and parenting styles in their families.

**Methods** Participants were 27 adolescents with IBD (21 Crohn's disease, 6 ulcerative colitis) and 43 healthy controls of the same age (13-16 years). Participants and their parents completed questionnaires about the quality of life (KidScreen-10, PedsQL), depression (CDI, BDI), anxiety (ŠAD, BAI) and parenting styles (ADOR).

**Results** The QoL measured by questionnaires did not differ between adolescents but was significantly lower in parents of children with IBD than in healthy controls. Parents of IBD children scored lower in Family Impact Module Total Scale Score and in parent Health-related QoL Summary Score. Fathers of IBD children had also lower level of Family Functioning Summary Score. There wasn't any difference in parenting styles, nor the levels of anxiety and depressive symptoms in children. Parents of IBD children expressed higher anxiety and depression than parents of healthy control group. Mothers of IBD children scored significantly higher in the anxiety tests, but mostly reached only level of low anxiety. Mothers' mean score in BDI didn't differ, but relatively more mothers with mild and moderate depression were found in group of IBD children than in the healthy control group. Fathers of IBD children scored significantly higher in depression tests than fathers of healthy children, mostly reached only level of minimal or mild depression.

**Conclusions** Parents of children with IBD struggle with more anxiety and depression and present lower QoL measured by PedsQL than their healthy controls. Children show similar symptoms of depression, anxiety and QoL measured by KidScreen-10. Supported by IGA MZ CZ NT14281-3



## **PRODROMOS DE UN PROCESO ESQUIZOFRENICO: ABORDAJE DESDE UN CENTRO DE MENORES TERAPEUTICO**

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### **Objetivo:**

El objetivo del presente trabajo es estudiar la fase de los prodromos del proceso esquizofrenico. Para ello se realizó una búsqueda bibliográfica, que nos clarificó esta fase de la enfermedad, y aplicamos esos conocimientos teóricos en dos menores ingresados con esas características clínicas en nuestro centro terapéutico.

### **Métodos:**

Búsqueda bibliográfica.

Descripción del cuadro clínico y del abordaje terapéutico multidisciplinar de dos menores, cuyo cuadro clínico, es compatible con unos prodromos de una esquizofrenia.

### **Resultados:**

Si consideramos los prodromos (Mayer Gross) como un periodo de aparición de síntomas manifiestos, precedida de alteraciones comportamentales inespecíficas, observamos que en ambos casos se cumple (inestabilidad emocional, alteraciones sensorceptivas, centralidad, angustia...).

Yung y Mc Gorry nos hablan de la dificultad de cuantificar esos síntomas, y la justificación de iniciar un abordaje. En nuestro caso iniciamos un tratamiento integral utilizando psicofármacos y usamos todos los recursos psicoterapéuticos del centro, obteniendo una clara mejoría global en la evolución de ambos menores.

La intervención de nuestro centro con estos dos menores, sería una prevención primaria selectiva, ya que en ambos casos hay antecedentes de psicosis de primer grado (Gordon) La intervención ambiental llevada a cabo en el centro, creemos que es clave para reducir el estrés social, que podría ser el inductor junto a una vulnerabilidad genética (esquizotaxia, Meehl) del futuro proceso esquizofrenico; y así lograr una mejor evolución.

### **Conclusiones:**

- 1- Nuestros dos menores cumplen con los criterios diagnósticos para los prodromos de esquizofrenia
- 2- El abordaje terapéutico integral que se está llevando a cabo está resultando muy positivo y podrá ser clave para una evolución más benigna del proceso esquizofrenico en la vida de ambos menores.

## CLINICAL COMMUNICATION STRATEGIES WITH AUTISTIC CHILDREN

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**Objectives:** Review on clinical communication skills useful to the primary care physician when approaching a child with autism and their parents.

**Methods:** A review of the literature, articles that mentioned communication strategies with autistic children, in clinical context, and associated difficulties were included.

**Results:** The literature, even though limited, emphasizes the importance of the child's own characteristics, in a patient-centered perspective. The use of specific strategies reveals itself useful to the preparation of the context, clinical interview and physical examination. A previous interview with the parents is advised, in order to collect important information to establish the necessary adaptations and provide material to help autistic children to get used to the medical environment. It is important to adapt the environment of the waiting room and medical office. The time spent with the patient must be conducted with patience, tranquility and flexibility. Direct communication with the child must be simple, positive, making further use of visual items and the child's own interests. The different phases of the physical exam must be explained and/or exemplified, reinforcing in a positive way the collaboration. Parent involvement and collaboration is essential to tranquilize the child and favor communication and their concerns should be regarded.

**Conclusions:** The provision of medical care, considering an autistic child represents a unique challenge to the doctor. The implementation of specific strategies makes the communication and the relation doctor-patient easier, promoting the efficacy and satisfaction with the health care. It is necessary the reinforce of future and further investigation, to validate the use of such strategies and create new suggestions and also to advance development of training programs regarding specific clinical communication skills to children with ASD.

## DEVELOPMENTAL DISABILITY AND ANXIETY DISORDERS IN SCHOOLCHILDREN FROM FOUR BRAZILIAN REGIONS

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**Objective:** To examine the relationship between child developmental disabilities and anxiety disorders in Brazilian schoolchildren when taking into account other important correlates.

**Methods:** We conducted a cross-sectional, school-based epidemiological study involving a probabilistic sample of 1639 children enrolled in grades two to six (6-16 years) from public schools located in southeast, central, northeast and north Brazil. Child anxiety disorders and externalizing disorders (conduct, oppositional defiant and attention-deficit/hyperactivity disorders) were diagnosed based on mother/primary caregiver's response to the Schedule for Affective Disorders and Schizophrenia for School Age Children/K-SADS-PL. The Ten Question Screening questionnaire assessed child developmental disabilities. The Self-Reporting Questionnaire (SRQ-20) identified anxiety/depression in mothers/caregivers (score>7). Data were analysed using Multivariate Poisson regression.

**Results:** In the total sample, 7% of students had at least one anxiety disorder and 42.0% screened positive for any developmental disability (24.6% had one disability and 17.4% had two or more disabilities). Multivariate modelling showed that children with two or more developmental disabilities were 2.5 times more likely to present any anxiety disorder (Prevalence Rate=2.48; 95% Confidence Interval: 1.67-3.68) than children without disabilities when taking into account all other significant correlates (country region, child externalizing disorders and mother/caregiver anxiety/depression).

**Conclusions:** Developmental disabilities are an important factor associated to anxiety disorders in Brazilian schoolchildren. School might therefore be an appropriate setting for the early screening of child disabilities. Empowering school personnel by increasing their skills to identify children with disabilities would favor early referral to health evaluation and care in this group with a high risk of developing anxiety disorders.

## **PARENTS OF CHILDREN WITH ADHD AND AUTISM: FUNCTIONING, QUALITY OF LIFE AND MENTAL HEALTH SERVICES UTILISATION**

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### **Objectives**

The present study main aim was to assess whether parents of children with ADHD and autism have lower functioning and quality of life and higher mental health services utilisation. Secondly, we intended to understand possible moderators explaining this association and distinguish between environmental factors, such as higher burden associated with their children, and biological factors, such as shared genetic liability and intermediate phenotypes of disorders affecting their children.

### **Methods**

A retrospective observational design was used. The study included 3 groups: parents of children with ADHD, parents of children with autism and a control group (parents of healthy children). We designed an extensive questionnaire to assess academic attainment, social, personal and professional functioning, as well as mental health services utilisation. We also assessed the presence of ADHD and autism symptoms, using the ADHD Adult Rating Scale and Autism Quotient, respectively.

### **Results**

A total of 360 parents participated in the study. Preliminary results show that parents of children with ADHD and autism have significantly lower functioning, relating not only to higher burden associated to care their children need but remarkably to a shared phenotypic expression of their children disorders.

### **Conclusions**

The present study shows that parents of children with ADHD and autism have a much lower functioning in several areas of their lives, reduced quality of life and higher mental health services utilisation. Such a difference is partly explained by an intermediate phenotypic presentation of their children's disorder.

## **PSYCHOPATHIC TRAITS IN ADOLESCENTS WITH CONDUCT DISORDER**

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**Objectives:** The presence of psychopathic traits in adolescents with conduct disorder may influence the frequency and severity of deviant/delinquent behavior, and their importance in distinguishing serious and persistent antisocial youths has been gaining increasing support. The assessment of psychopathic traits (lack of empathy, lack of guilt, shallow emotions, deceitfulness) may allow the clinicians to determine a subgroup in patients with Conduct Disorder with more dangerous and aggressive behavior and poorer prognosis, with different implications in treatment options.

The authors aim to determine the prevalence of psychopathic traits in a clinical sample of patients with conduct disorder, and to evaluate the correlation between the frequency and nature of delinquent acts (severity of antisocial behavior) committed by patients and the presence of psychopathic traits .

**Methods:** We will measure psychopathic traits and deviant behavior in a clinical and convenience sample, using the Antisocial Process Screening Device-Self Report (Frick & Hare, 2001) and the Self - Reported Delinquency Scale (Carroll, Houghton & Hattie, 1996). The sample is on recruitment.

**Results:** We predict that the presence of psychopathic traits will be correlated with more frequent and severe deviant/delinquent behavior.

**Conclusions:** We hope to confirm in a clinical sample the relation between psychopathic traits and deviant/delinquent behavior in adolescents with Conduct Disorder.

## **PSYCHIATRIC DISORDERS IN PEDIATRIC CONGENITAL HEART DISEASE**

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### **Objectives**

To establish the prevalence of psychiatric disorders in children and adolescents between 6 and 18 years with a history of congenital heart disease in our population and the most common psychiatric disorders .

### **Methods**

Cross sectional study of children and adolescents treated for congenital heart disease unit (CCU). Initial results from a sample of 35 cases are presented. Studied prior informed consent paidopsiquiátrica usual clinical assessment and implementation of K - SADS -PL ; Conner's RS ; CBCL ; WISC -IV , CMAS -R , CDI; PROLEC RT SE.

### **Results**

Predominantly women and mean age of 12.

Congenital heart disease is the most represented based stenosis and nearly half still continued drug treatment.

Present some results of an average mean IQ although paradoxically predominantly associated with poor school performance.

Psychiatric disorders occur in over 70% of the studied cases fulfilling DSM diagnostic criteria. Stressing ADHD: more than 40 %.

Psychiatric disorders are not less than 30% .

Striking is the low prevalence of depressive disorders as well as contrary to somatic complaints anxiety disorders.

### **Conclusions**

The results confirm the high prevalence reported in the literature highlighting ADHD. Aspect that we consider very important for being a treatable and modifiable cause disorders likely poor school performance often associated and significant global impact.

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## **“A SOUND MIND IN A HEALTHY BODY”. ANTIPSYCHOTIC PRESCRIBING PRACTICE AND PHYSICAL HEALTH MONITORING IN ADOLESCENT PSYCHIATRIC INTENSIVE CARE UNIT IN MANCHESTER, UK**

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F Khan

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### **Objectives:**

Comparison of antipsychotic prescribing practice and physical health monitoring with National Institute of Health and Clinical Excellence standards (1).

### **Method:**

Audit Tool from NICE Guidelines for Psychosis and Schizophrenia in children and young people (1) was adapted and used for inpatient setting.

Data was collected from 10 inpatients presenting with risks to self and others due to psychosis, personality disorder, Pervasive developmental disorder; Asperger's Syndrome, bipolar affective disorder and Organic psychosis( 2).

### **Results:**

100% had oral antipsychotic medication prescribed, 50% had family intervention offered and 80% had psychological intervention offered.

100% ECG was specified in the SPC, 100% of young people were offered an ECG before starting antipsychotic medication.

100% had recorded expected benefits and risks of oral antipsychotic medication, reasons for dosage above BNF limit, rational for continuing, changing or stopping medication and effects of continuing, changing or stopping medication. 100% weekly review of PRN medication.

On admission 77.8 % weight, 66.7% height, 22.2% waist Circumference, 0% hip circumference, 20% Fasting blood glucose, 30% Glycosylated haemoglobin, 30% Blood lipid profile, was recorded.

2 weeks after admission 30% fasting blood glucose, 30% glycosylated haemoglobin, 40% blood lipid profile, 30% Prolactin level, 40% Blood lipid profile, 10% assessment of nutritional status, 40% Assessment of diet.

### **Conclusions:**

This audit confirms that the prescription of antipsychotic medication is in line with evidence available.

The prescribing practice is compliant with the NICE Guideline standards.

Physical health monitoring to be improved by developing local protocol and procedure.

Due to wide geographical referral base, creative and flexible ways of offering family therapy to be considered.

## QUALITY OF LIFE IN CHILDREN WITH MENTAL ILLNESS PARENTS

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### Introduction.

Several family stress factors consistently have been shown to be associated with deficits in child functioning. Among stressors that have received considerable attention in the research literature are divorce, inter parental conflicts and maternal depression. One life event that may be associated with child functioning is the chronic illness of a parent (Steel et al,1997).

The children of seriously ill parents are at risk for emotional and behavioral disturbances. Ill parents' subjective perception of their impairment predicted children's symptoms better than the objective degree of severity of their disease (Romer et al, 2002).

### Objective

The primary aim of this study is to identify the principal difficulties (behavioral and emotional) and also the quality of life in children with one parent suffering of mental illness.

### Method.

We identify a sample of 50 parents with a chronic psychiatric illness (schizophrenia, mood disorders).

We use the Strengths and Difficulties Questionnaire - to identify behavioral and emotional problems in children and Child Health Profile (parent's version) to investigate quality of life in children.

The same tools were used in a sample of 50 healthy controls.

Data were statistical analyses using SPSS 16.0.

### Results. Conclusions

The results are still in progress but from preliminary results we can conclude that quality of life is more affected in children with parents suffering by psychiatric illness. Also these children seems to be at risk to develop more behavioral and emotional problems.

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## FACTORES COGNITIVOS Y SÍNTOMAS DE DEPRESIÓN EN HOMBRES Y MUJERES ESTUDIANTES PRE-UNIVERSITARIOS

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**Objetivo:** Determinar cuáles son los factores de vulnerabilidad cognitiva que se asocian a los síntomas de depresión en estudiantes.

**Métodos:** Estudio transversal analítico en una muestra de 2292 adolescentes estudiantes del nivel medio superior, con una edad entre 15 y 19 años, (54% mujeres y 46% hombres).

**Instrumentos:** Escala de Depresión del Centro de Estudios Epidemiológicos. Esquemas Cognitivos forma reducida, Cuestionario de Pensamientos Automáticos Negativos y Escala de desesperanza.

**Análisis estadístico:** Análisis descriptivo, T de Student y regresión lineal.

**Resultados:** Prevalencia de síntomas de depresión en el 15.6% de los adolescentes, con predominio en las mujeres. La sintomatología depresiva se asoció de forma positiva con los factores cognitivos: esquemas cognitivos, pensamientos automáticos negativos, y desesperanza. Los pensamientos automáticos negativos explicaron el 42.1% de la varianza, mientras que la desesperanza explicó el 17.8%. Las mujeres presentaron mayor puntaje en todas las escalas.

**Conclusiones:** Este estudio muestra la coherencia con los modelos (cognitivo de Beck, desesperanza) donde se confirma la presencia de cogniciones negativas y su relación con los sintomatología depresiva, así como el hecho de que las mujeres muestren un mayor número de síntomas que los hombres, por ser estas las que tienden a mostrar mayor puntaje en los factores cognitiva desadaptativos.

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## **A STUDY OF SERUM INTERLEUKIN 12 IN A SAMPLE OF AUTISTIC CHILDREN IN EGYPT**

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**Introduction:** ASD prevalence varies widely by sex and racial/ ethnic group. Male to female ratio ranged from 3-4:1. Some consider ASD as is an autoimmune disorder, in which autoimmune response to the developing brain myelin may impair anatomical development of neural pathways in autistic children; this affects the speed of impulse transmission. Interleukin 12 (IL(12))is an interleukin that is naturally produced by dendritic cells, macrophages in response to antigenic stimulation; it plays an important role in the activities of natural killer cells and T lymphocytes.

**Objectives:** The present study was conducted to compare between the level of serum IL12 in children with AD and in control group.

**Methods:** A cross sectional study were done on two groups, group 1: twenty patients with autistic disorder and a control group: twenty normal children matched for age and sex, recruited from Al Hadra University Hospital neuropsychiatric outpatients clinic .ASD was diagnosed by complete psychiatric history, physical and neurological examination, psychometric assessment by CARS, and estimation of serum IL 12 was done using ELIZA method.

**Results:** The mean of the serum level of IL12 was significantly higher in ASD children than in controls and was related non-significantly younger age group, girls, spoken language; CARS mean score and positive family history.

**Conclusion:** The study pointed out to an immunological impairment in the form of elevated serum level of IL12 in ASD children which may support the immunological etiology of ASD.

## FUNCTIONS OF NON-SUICIDAL SELF-INJURY IN ADOLESCENTS

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**Objectives:** Few studies have investigated non-suicidal self-injury (NSSI), or the deliberate, direct destruction of body tissue without conscious suicidal intent, and the motivations for engaging in NSSI among adolescents. The present study is an exploratory investigation assessing the functions of NSSI and associated clinical characteristics in a clinical sample of adolescents.

**Methods:** Participants included a diverse sample of self-injuring adolescents (N = 30). A questionnaire with socio-demographic and health variables was applied. The meanings and the functions of NSSI were evaluated through a semi-structured interview, lasting 30-45 minutes.

**Results:** Consistent with previous research, the adolescents reported intrapersonal functions (e.g. affect regulation and self-punishment) and interpersonal functions (e.g. interpersonal influence and peer bonding) with a predominance of a specific function and thematic which could be included in different theoretical models.

**Conclusions:** Adolescents engage in NSSI in the service of different purposes revealing the overdetermination of these behaviors. Although the complexity of the NSSI, it is necessary to differentiate one function from another and a particular theoretical model in order to refine the understanding and thus the treatment of NSSI.

## **BULLYING AND PSYCHOTIC EXPERIENCES: LITERATURE REVIEW AND CASE REPORTS**

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### **Objectives**

To review the scientific evidence that supports the association between bullying, psychotic-like experiences in child and adolescents, and psychosis outcome in adulthood. Clinical illustration will be provided by two case reports.

### **Methods**

A systematic literature review was performed in MEDLINE, with special focus in papers published in the last 10 years. Two adolescents from an outpatient child and adolescent mental health service, were selected as case reports.

### **Results**

Children who experienced bullying by peers were more likely to report psychotic symptoms in childhood and adolescence than those who did not experience such traumatic event. This elevated risk extends into late adolescence, and association between childhood trauma and psychotic symptoms in adulthood has been demonstrated. Both bullying and being bullied was associated with an increased level of subclinical psychotic experiences. Meta-analysis results found a significant association between childhood adversity and psychosis, with an overall effect of OR=2.78 (95% CI=2.34-3.31). A prospective study provides evidence of cessation of traumatic experiences leading to reduce incidence of psychotic experiences. Two case reports will be described as examples of the relation between being bullied and psychosis like symptoms: clinical data, psychopathology, diagnosis and treatment.

### **Conclusions**

Literature suggests that childhood trauma may increase the risk of psychotic experiences. Clinicians working with children who reports psychotic symptoms should inquire about traumatic event such as bullying. Case reports confirm literature evidence, evolution towards a psychotic disorder is possible and long-term monitoring is needed to assess outcome. A relationship between specific early-life adversities and specific psychotic symptoms is suggested (bullying would be specifically associated with paranoid ideation), but more research is required.

## DENTAL CLINIC STUDY ON ASD PATIENTS

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<sup>1</sup>. Medical School, University of Sao Paulo

**Objectives.** Characterize the oral condition of patients diagnosed with Autistic Spectrum Disorder (ASD) and verify possible correlation between symptoms of dental disease and changes in the behavior of these patients.

**Methods.** One hundred fifty dental records of patients diagnosed with Autism Spectrum Disorder (ASD) were evaluated. These patients were treated between 2007 and 2013. Age, gender, decayed, missing and, filled tooth (DMFT), complaining and dental diagnosis were evaluated.

**Results.** From the records evaluated, 76% were men and the age ranged from 2 to 32 years. DMFT was 3,6. The main reasons for referral the patient to the dentistry team was routine consultation (54,5%) and sudden change of behavior (20%). 26% of this patients had oral diseases. As the main complaint reported by the caregiver, 26,6% referred sudden change of behavior (pointing teeth repeatedly, punching face or teeth), 7,3% referred difficulty in brushing, 6% gingival bleeding, 6% caries, 3,3% broken teeth, 3,3% orthodontic complaints, 2,6% bruxism, 1,3% dental mobility, 0,66% increase of salivation, 0,6% bad breath. The main dental diagnosis were caries (27,3%), caries and gingivitis (26%), only gingivitis (13,3%), broken tooth (6%), mobility in deciduous tooth (3,3%). 2% did not allowed dental treatment. 40,6% of patients allowed dental treatment. 31,3% showed agitation and underwent sedation, while 26% were treated under general anesthesia.

**Conclusion.** The percentage of patients with ASD that showed changes in behavior and symptoms of oral disease at the same time was 20%. This data warrant prospective investigations in this area.

## **TRAUMA EVIDENCED-BASED INTERVENTION AMONG A DIVERSE GROUP OF CHILDREN**

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**OBJECTIVES:** Structured Sensory Intervention for Traumatized Children, Adolescents, and Parents (SIT-CAP, Steele & Raider, 2009), and Eye Movement Desensitization, and Reprocessing EMDR, which are evidence-based trauma intervention model.

**METHODS:** This presentation will address several trauma case studies using the SITCAP model and EMDR. Four children ages ranging from 6 to 13, from a diverse ethnic background living in the Midwest area in the United States participated in this intervention. Their trauma experiences included sexual abuse by a caretaker, dog bite, mother's illness. A PTSD Child and Adolescents questionnaire was completed at intake and at the end of the intervention. These questionnaires assessed for the severity and frequency of the following symptoms: reexperiencing, avoidance, and increased arousal due to the traumatic event.

**RESULTS:** Children who underwent the SITCAP treatment experienced less behavioral problems at home and at school, less fear talking about the past trauma. They learnt about effective coping skills. EMDR was most difficult with children because of the intensity and the uniqueness of the techniques, however, one child found it beneficial.

**CONCLUSIONS:** The SITCAP model addresses major trauma related symptoms (e.g., fear, terror, worry, hurt, anger) and apply sensory and implicit strategies design to re order cognitively the traumatic experience in ways that moves the children from victims to survivors (Steele, 2009). Researchers believe that traumatic experiences are remembered by the body at a sensory level and gather as an implicit memory making trauma a sensory experience (Rothschild, 2000; Van der Kolk, 2006; Levine, 2008). Thus, in order for the experiences to be manageable, they must be processed first at a sensory level prior to reaching a cognitive level (Rothschild, 2000).

**NEUROPSYCHOLOGICAL, SOCIAL CORRELATES OF  
ANTISOCIAL BEHAVIOR AMONG  
ADOLESCENTS IN CONFLICT WITH THE LAW AND STUDENTS  
OF AN INSTITUTE  
EDUCATION OF THE PROVINCE OF CÓRDOBA**

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**Objective:** Traits were studied and recorded linked with difficult temperament are vulnerable to antisocial behavior and social characteristics were compared male youth in conflict with the law regarding youth who are not.

**Tools:** Cantoblanco socialization difficulties Scale was used that evaluated variables: Impulsivity, Sensation Seeking, Absence of Fear and the Global Assessment Scale and sociodemographic variables sheet for the purpose of finding a useful tool for detecting antisocial behavior traits in our environment and correlate this tool prior social variables that may be determinants of such behaviors.

**Results:** Regarding Socialization Difficulties Scale was detected in cases Very Low Difficulty, Difficulty and Difficulty Average Low 68.3% compared with the control group presented 81.3%. For variables High and Very High Difficulty Difficulty for cases 31.7% and 18.7% control group differences were statistically significant  $p = 0.0018$ .

**Conclusion:** We conclude that the scale of Socialization Difficulties with sociodemographic detection is a useful tool to detect vulnerability and antisocial behavior tendencies in our midst.

## **CHILD ABUSE AND IT'S RELATION TO TYPES OF INFRACTION**

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2. Trujillo National University

**Objectives:** Determinate if there is a relation between child abuse and types of infractions, determinate the frequency of child abuse, determinate the types of child abuse that have a significant relation with the types of infraction.

**Methods:** This is a descriptive transversal study. A Childhood Trauma Questionnaire Short For (CTQ-SF) will be applied to the children and teenagers that are recluse in the "Youth Centre of Diagnosis and Rehab of Trujillo". The information obtained will be analysed by ANOVA and will determinate if there is a relation between types of child abuse and types of infractions made by teenagers reclused. After that will be applied the logistic regression analysis to determinate the types of child abuse that have a significant relation with the types of infractions.

**Results:** In a descendent order of the frequencies of the types of child abuse are: Physical Negligence (84.9%), Emotional Negligence (82.6%), Physical Abuse (77.9%), Emotional Abuse (61.6%) and finally Sexual Abuse (25.6%). In a descendent order of frequencies of the types of infractions are: against the patrimony (54.65%), against sexual freedom (19.77%), against the life, body and health (13.95%), illegal use of guns (11.63%) and finally illicit traffic of drugs, terrorism and gang violence.

**Conclusions:** There is a significant relation between child abuse and types of infractions.



## **THE USE OF FOCUS GROUPS IN THE DEVELOPMENT OF COMMUNITY-BASED EDUCATIONAL WORKSHOPS FOR TEACHERS AND PARENTS IN SOUTH LEBANON**

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American University of Beirut<sup>1</sup>

Lebanese American University<sup>2</sup>

**Aims:** To identify knowledge, attitudes, and practices (KAPs) in teachers and parents about child/adolescent mental health pre-intervention.

**Educational Objectives:** participants will 1) understand the role mental health interventions play in the wellbeing of conflict-prone communities and 2) identify the benefits of focus groups for intervention planning.

**Method:** This is a phase one of a larger study and followed a qualitative descriptive approach. Five focus groups were conducted with teachers (n=27) and parents of students (n=18) from two schools in South Lebanon. A purposeful sampling was employed in which participants were selected based on knowledge of a phenomena and their willingness to share their experience. Focus groups discussions along with field notes were used as data sources which were audio-taped and transcribed verbatim. Data interpretation followed a descriptive analysis approach.

**Results:** Parents and teachers highlighted the importance of mental health which they related to physical health. Both groups reported about symptoms perceived as indicators of alteration in mental health. Participants of the study emphasized the need for mental health awareness in order to destigmatize mental illness.

**Conclusion:** The use of focus groups pre-intervention is an effective tool for assessing needs of a target population. Application for culturally-sensitive educational initiatives was identified.

## **BULLYING, PSYCHOLOGY AND EMOTIONS AMONG OMANI ADOLESCENTS IN MUSCAT SCHOOLS**

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### **Objectives**

Bullying is one of the serious problems that children and adolescents may face during their schooling, which occurs in each and every school around the world. Bullying may affect the psychology and emotions of the youth leading to disastrous outcomes. This study aimed to assess the presence and significance of bullying among Omani adolescents in schools.

### **Methods**

1229 grade 8 Omani adolescents (536 males and 643 females) were randomly selected from different regions of Muscat governorate. The pupils were asked to complete a validated and reliable questionnaire regarding bullying and associated emotional consequences.

### **Results**

It was found that 76.5% of boys and 76.1% of girls experienced one or another form of bullying. In 80% of the incidents, the students reported that bullying took place in the school and only 22.8% of victims asked for help. 50% of bullying was initiated by same age students or older. The most common type of bullying were verbal (47.7%), property exploitation (45.9%), physical (43.9%), and social isolation/exclusion (22.5%). The causes of bullying were unknown in (35%) of victims, due to physical appearance in (22.1%) of cases, academic performance in (10.7%), and speech problems in (9.3%). The victims of bullying exhibit easy boredom, sadness, anger and frustration, worries, scariness in new situation, easy distractibility and poor concentration, and psychosomatic complaints more than their control group ( $P < 0.001$ ).

**Conclusion:** Bullying of Omani adolescents in schools is a common problem that needs to be addressed and dealt with seriously. It has been found to be associated with cognitive, emotional and psychosomatic complaints, which may affect the quality of life negatively.

## **WPA-0092 GENETIC EVALUATION IN CHILDREN WITH ADHD WITH A GENETIC TEST “NEUROFARMAGEN ADHD”**

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### **Introduction and objectives**

ADHD is a neurological disorder characterized by behavioral symptoms such as inattention, hyperactivity and impulsivity. Environmental factors contribute to their etiology, although its origin is essentially genetic. Numerous studies of twins and adopted children support this data. Specifically, it is considered that heredity is present in 80% of cases. Furthermore, it has been found that the gene is a major factor that controls the patient's response to a given drug. Therefore, in order to get the right answers, Neurofarmagen examines key genes associated with ADHD.

NFG is a new genetic test that analyzes the main genetic markers associated with ADHD. A variant related to the prevalence, 2 variants related to comorbidities and 4 variant associated with drug response.

### **Methods**

Genetic analysis of 6 ADHD patients.

### **Results**

DAT1	Variant Linked to High Prevalence of ADHD
ADRA2A	Increased Likelihood of Response to Methylphenidate
COMT	Increased Likelihood of Response to Methylphenidate
CYP2D6	Need to Lower Doses of Atomoxetine
DAT1<<	Standard response to methylphenidate
COMT<<	Variant Linked to High Conduct Disorder
OPRMI	Variant Linked to Increased Risk of Substance Abuse

### **Discussion**

Neurofarmagen genetic biomarkers will form in the very near future a useful practice to predict response to various treatments and analyze comorbidity and risk factors. Currently, NFG is helping specialists to better understand the genetic characteristics of ADHD patients.

## **WPA-0094 OUR EXPERIENCE WITH ATOMOXETINE IN THE TREATMENT OF CHILDREN WITH ADHD**

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### **Introduction and objectives**

Methylphenidate and atomoxetine are the only two drugs approved in Spain for the pharmacological treatment of ADHD. The therapeutic response to MTF obtain favorable efficacy and safety in about 80% of patients. However, there remains a reasonable group of patients who do not get a complete response.

### **Methods**

Evaluation of clinical practice.

### **Results**

We revise 23 ADHD patients treated with ATX. The first 7(30%) patients who began treatment with ATX did according to a recommended regimen in the data sheet drug. Of these, 5(70%) had to discontinue treatment due to adverse effects, mainly nausea and abdominal pain (60%),

After these first cases of intolerance, we chose to drive a more conservative r\*gimen starting at doses of 0.4-0.5mg/kg/day; we accomplish rise to 0.8\*1,2mg/kg/day for 2 weeks. Thus, we have presented new problems of tolerance in any of the remaining cases. In parallel, these patients had an early clinical response compared to that in sheet, reaching figures of symptomatic remission in 80% to the 3 months.

### **Discussion**

Based on the favorable results obtained, we can confirm that with a starting dose lower than the recommended sheet and an escalation of slower dose, the ATX is an effective and safe drug for ADHD treatment.

The patients in our series show a clinical response faster and the previously described adverse effects less than expected.. We propose the use ATX in terms of family preferences or clinical characteristics of the patient.

## **WPA-0096 TEST-RETEST VALIDATION OF AULANESPLORA (VIRTUAL REALITY CONTINUOUS PERFORMANCE TEST) FOR CHILDREN WITH ADHD**

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### **Introduction and objectives**

ADHD is the main reason for consultation in most Spanish Neuropediatrics units reaching 7% of individuals of school age and up to 4% of the adult population.

The diagnostic difficulties existing and the serious implications of misdiagnosis or inadequate treatment creates the need to develop new procedures that allow us a better appreciation of our patients.

Advances in new technology and video games increasingly provide opportunities for clinical practice. AULANESPLORA is a continuous performance test that incorporates latest technology based on virtual reality and 3D environment for collecting live information and objective information on the core symptoms of ADHD

### **Methods**

One of the limitations that may appear to repeat a test is the learning bias. To demonstrate the absence of it in AULANESPLORA we studied a group of 30 patients who underwent the test under the same conditions a week apart.

### **Results**

The results of this study conclude that no significant differences between the results of the first and second study. And therefore there is no learning bias that would invalidate the results of the study with differences equal to or greater than one week lag.

### **Discussion**

His objectivity, speed, stability and ability to perform periodic comparisons of the situation of each individual in a short space of time, are such that AULANESPLORA is a test of great practical value in assessing patients with ADHD

## WPA-0098 UTILITY OF REBOXETINE IN THE TREATMENT OF CHILDREN WITH ADHD

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### Introduction and objectives

The pharmacological treatment of ADHD in Spain is based on the management of methylphenidate (MTF) and atomoxetine. Currently we have 3 different presentations of MTF.

Other drugs such as Dextranfetamina, reboxetine (RBX), Guafenecina or modafinil are described sporadically in the literature on ADHD in a small group of patients and are licensed in other countries with variable and poorly consolidated. There is abundant evidence of the usefulness of drugs not psychostimulants for ADHD.

### Methods

We present 4 children suffering from ADHD treated with RBX with a good therapeutic response and no side effects. These patients were initially treated with MTF and showed lack of response or adverse reactions.

### Results

P	ADHD type	Other	Previous treat.	Result	Age	Sex	RBX Result	Dose
1	Combined	NF1	MTF (2 types)	No response	15	Male	Response	3mgx2
2	Combined	Hirshprung	MTF (2 types) ATX	No response Constipation	7	Male	Response	2mgx2
3	Combined	Non	MTF /2 types)		9	Male	Response	4mgx1
4	Inatention	Non	MTF OROS	Arritmya	10	Male	Response	4mgx1

We obtain clinical referral in all patients treated with RBX.

### Discussion

It has been proven the effectiveness of RBX in major depression and panic disorder in adults.

Appears in the literature a clinical trial studying the usefulness of RBX in patients between 6-16 years of age who have had adverse reactions to the MTF. Both groups of patients show significant improvement with no significant differences between them RBX, by their efficacy and safety, could be valued as an alternative to MTF and ATX in ADHD treatment.

## **WPA-0134 ADHD IN OLDER ADULTS: EPIDEMIOLOGICAL DATA ON PREVALENCE, COMORBIDITY AND PHYSICAL HEALTH FROM THE LASA STUDY AMSTERDAM**

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**Background and aims:** ADHD is a lifespan neurobiological disorder with childhood onset. Little is known about the development of ADHD in older people.

**Methods:** Data were used from the Longitudinal Aging Study Amsterdam (LASA). At baseline, 1494 participants were screened with an ADHD questionnaire and in 231 respondents a structured diagnostic interview (DIVA 2.0) was administered.

**Results:** The estimated prevalence rate of syndromatic ADHD in older adults was 2.8%; for symptomatic ADHD the rate was 4.2%. ADHD was more prevalent in younger than in older olds. ADHD was associated with more anxiety and depressive symptoms cross-sectionally as well as longitudinally compared to controls. ADHD in older people was associated with chronic nonspecific lung diseases (CNSLD), cardiovascular diseases, and number of chronic diseases. ADHD was negatively associated with self-perceived health.

**Conclusions:** Prevalence and comorbidity with anxiety and depression in older people with ADHD show similar patterns as in younger age groups. Regarding physical health there are indications that older people with ADHD may have worse health outcomes and die younger.

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## **WPA-0081 PREVALENCE RATE OF PSYCHIATRIC DISORDER AMONG SAUDI FEMALE ADOLESCENT ATTENDING HIGH SCHOOL IN RIYADH**

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**Background:** Studies have showed that mental health problems at a young age can lead to greater impairment in adult life. Epidemiological evidence on the prevalence and incidence of mental health disorders is fundamental not only for understanding the etiology of such disorders but also for planning of mental health services. However, there is no such information about the children and adolescents in Saudi Arabia. Therefore, the proposed study aims to examine the prevalence rate of mental health problems of Saudi female adolescent attending high school in Riyadh city.

**Aims:** To assess the prevalence rate of specific psychiatric disorders (e.g. Anxiety disorders, affective disorders, behavioural disorders, eating disorders) and the extent to which specific demographic variables can predict the presence of psychiatric diagnosis in a representative sample.

**Methods:** This is a two-stage epidemiological study involves:

- (1) Screening all eligible participants for the presence of a possible psychiatric disorder using the Strength and Difficulties Questionnaire (SDQ).
- (2) Interview a sub-sample to confirm the presence or absence of psychiatric disorder using a structured psychiatric interview (MINI-Kid).

**Results:** Participants were recruited from high schools (public and private) in Riyadh city using a probability sample technique. Around 4000 female students were screened and around 680 were interviewed in the second stage. The study is currently under analysis and findings will be ready for the conference.

**Implications:** The result of the study will help planning of child and adolescent mental health services targeting those with mental health problems; planning an early detection and prevention programs for those at risk; setting directions for future research in child and adolescent mental health issues



## WPA-0091 CARDIOVASCULAR SIDE EFFECTS SECONDARY TO TREATMENT WITH METHYLPHENIDATE IN CHILDREN

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### Introduction

ADHD is the most common neuropsychological disorder in childhood. By all international guidelines, psychostimulants such as methylphenidate (MTF), the most experienced, are the treatment of first choice.

The MTF has been associated with cardiovascular adverse reactions in children as mild high blood pressure transiently, sinus tachycardia, mild self-limited, and so on. On the other hand, serious cardiovascular adverse reactions are rare. However, patients suffering from cardiovascular pathology are at increased risk basis of complications of this type. Finally, healthy patients may also have serious complications secondary to treatment with MTF idiosyncratic way

### Methods

Evaluation of clinical practice.

### Results

We evaluated 720 inquiries between 2008 and 2009 of patients with ADHD. We obtained a total of three patients requiring discontinuation of treatment or decline due to adverse cardiovascular psicoestimulante moderate or severe.

Age	Sex	Weigh	Treatment	Response	Change	Result
10	Male	35	MTF OROS 36mg	> Blood Pressure	MTF OROS 18mg	Good
7	Male	26	MTF OROS 18mg	Tachycardia	MTF OROS 18mg	Good
8	Male	29	MTF OROS 18mg	Supraventricular Tachycardia*	Treatment suspensi—n *Propanolol	Good

### Conclusions

Cardiovascular adverse effects due to MTF are rare and generally mild and self limiting. The use of MTF is effective and safe if used properly and under close clinical monitoring.

## **WPA-0093 INFANTILE PSYCHOSIS SECONDARY TO METHYLPHENIDATE IN CHILDREN**

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### **Introduction and objectives:**

Methylphenidate (MTF) is a psychostimulant drug indicated as first choice in ADHD. The potential of psychostimulants to trigger manic or psychotic symptoms in children has been known for over 30 years. Lucas and Weiss reported three cases of 'hallucinosi' or 'toxicosis' by MTF. These two concepts are often used to describe transient symptoms of psychotic features that psychostimulants or other drugs produce to distinguish them from those in these diseases.

### **Methods**

Evaluation of clinical practice.

### **Results**

Children 10 years of age with a history of maternal alcohol and drug abuse. At age 8 was diagnosed with ADHD and remains pharmacological treatment with extended-release MTF with good results. After a clinical worsening, the dose was increased. A week later, the patient has severe psychotic symptoms. We proceeded to outpatient management and treatment discontinuation. About 12 hours after making MTF symptoms disappeared completely. Later Atomoxetine treatment was initiated with good results and without further complications.

### **Discussion**

Psychotic symptoms due to MTF are rare but can have moderate severity. Professionals and caregivers of children treated with psychostimulants should be aware of its appearance for a proper management in case of appearance. The use of atomoxetine can be an alternative for MTF

## **WPA-0095 STIMULANT AND NON STIMULANT COMBINED TREATMENT FOR CHILDREN WITH ADHD**

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### **Introduction and objectives:**

Methylphenidate and atomoxetine are the only two drugs approved in Spain for the pharmacological treatment of ADHD. The therapeutic response to the MTF is favorable in about 80% of patients. However, there remains a reasonable group of patients who do not get a complete response despite adequate doses of MTF or where adverse reactions occur.

### **Methods**

Evaluation of clinical practice.

### **Results**

We present a series of 4 patients diagnosed with ADHD who have had a partial response or adverse reactions related to the dose of MTF, and they have been added ATX treatment. In this group of patients, treatment with atomoxetine added to achieve the expected clinical management, referral. In these cases, the onset of ATX allowed dose reduction of MTF.

Combined use of MTF and ATX in our patients allowed adequate clinical control and standardization of quality of life parameters. Best results was achieved academic and behavioral problems associated without using neuroleptics and showed no adverse reactions related to medication that would justify modification or withdrawal of treatment. There were no laboratory abnormalities in the checks. Tolerance and compliance were very high.

### **Discussion**

The clinical response of patients with ADHD psychostimulant treatment is one of the highest reported in the literature, however, a group of patients in whom the response is not completely favorable. The combined use of MTF and ATX may be useful in these cases by the combination of effect and may allow adequate clinical control with relatively low doses of both compounds, thus reducing the possibility of adverse reactions.

## **WPA-0097 TREATMENT WITH METHYLPHENIDATE IN PATIENT WITH ADHD AND CONGENITAL HEART DEFECTS**

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### **Introduction and objectives:**

ADHD is a common diagnostic entity in children with important implications into adulthood. In Spain, methylphenidate and atomoxetine are the only two approved drugs for treatment. Methylphenidate has been associated with cardiovascular safety concerns related to heart rate, blood pressure and heart rate primarily. Cardiovascular contraindications include severe hypertension, heart failure, arterial occlusive disease, angina, hemodynamically significant congenital heart disease, cardiomyopathy, myocardial infarction, life-threatening arrhythmias and channelopathies.

### **Methods**

Evaluation of clinical practice.

### **Results**

We present ADHD 4 patients, 3 men and a woman suffering from congenital heart disease. Ages between 6 and 8 years and average weight is 24kg. The CHD consists on Transposition of great vessels, AV canal defect, pulmonary stenosis and a IAC\_OS intervened. All have made ??drug treatment at doses ranging from 0.8 to 1.4 Methylphenidate mg/kg/day and none has required withdrawal or dose reduction of occurrence of adverse events related to medication. The clinical evluci—n related to ADHD has been satisfactory in all of them.

### **Discussion**

Cardiovascular risks of methylphenidate should be valued in proportion and prudent to adjust strictly to international recommendations. There is concern among professionals and the general population for these risks, but if done proper management and controls to fit the needs in each case, we can obtain good clinical results without adverse effects. A close monitoring from the viewpoint of cardiac and neurological systems can improve the quality of life of these patients without a significant increase in medium to long term complications

## **WPA-0099 CLINICAL EXPERIENCE WITH EQUASYM FOR ADHD IN CHILDREN**

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The pharmacological treatment of ADHD is based on the use of different drugs according to patient characteristics, Physical examination and functional implications

We reviewed a total of 21 patients (76% male and 23% female) with a mean age of 7.4 years and an average weight of 24.8 kg Of these, 4.8% had ADHD-I, 61.9% ADHD-C and another 33.3% reported ADHD-HI. Comorbidities appear only in 14.9% of patients (Tics in TND 4.56% and the 9.52%).

Among the indications we have a 76.19% Equasym initial treatment, a 9.52% of indications for weight loss with another formulation of MTF, another 9.52% due to excessive duration of OROS MTF and 4.76% by rebound against OROS MTF.

With regard to effectiveness are seen significant reductions in symptoms assessed by the abbreviated Conners scale for parents in a similar to the known figures for other formulations of the MTF

Within the selected sample shows a predominance of men because of the short mean age of the components, which overestimates the presence of hyperactive-impulsive symptoms. This finding is consistent with the high proportion of patients with subtype Combined or Hyperactive-Impulsive (95.24%). Finally, because of the convenience and the dosage regimen available been easy administration to patients in preschool and school-age onset of causing a short average age in the sample.

Today it is considered a significant advance increasing armamentarium for ADHD. The different and varying response to different forms of methylphenidate is a therapeutic limitation can be diminished by new presentations.

## **WPA-0210 EMOTIONAL FACIAL RECOGNITION IN CHILDREN WITH AUTISM SPECTRUM DISORDER**

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**Background and aims:** Difficulties in emotion identification have long been observed in individuals with ASD. The ability to identify how another is feeling is imperative to interacting with others as another persons emotional state will guide an impending or ongoing social interaction. Evidence of emotion recognition has been linked to the development of relationships and self-regulation. Deficits in emotion identification may be a hallmark symptom of ASD. Subsequently, this study investigated the recognition of facial expression of emotions (positive or negative) in children with autism.

**Methods:** Children with autism ( $N = 15$ ) and normally developing children ( $N = 15$ ) were presented with photographs of people who differed according to four types of facial expressions of emotion (anger, fear, happiness, sadness).

**Results:** Results from identifying emotional facial expression task demonstrated that the ability of both groups is equal in recognizing emotional states of happy, sad and neutral conditions whereas there was a significant difference between groups in diagnosing anger and fear state.

**Conclusions:** The results are discussed with respect to hypothesized interaction of developmental factor, saliency of emotional stimuli and social experiences as explaining this difference.

## **WPA-0149 RISK PSYCHOSOCIAL FACTORS ASOCIATED TO SUICIDAL THOUGHTS AND ATTEMPTS ON THREE DEVELOPMENT STAGES**

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### **The study population is divided in two groups:**

- 1.- patients who presented a suicide attempt.
- 2.- patients diagnosed with other mental disease and presented suicidal thoughts.

### **Evaluation methods used for the study:**

- suicide conception of beck.
- suicidal risk of plutchik.
- de wilde interview (wich is divides in 3 stages).

**Objective:** identify psycho-stressful factors on the different development stages.

**Results:** the response to the stressful factors vary depending on wich development stage the patient is (childhood, adolescence or late adolescence).

the study shows a significant statistic correlation between the risk of presenting a suicide attempt and the dimension of the suicide attempt on the different development stages

more specifically:

Losses such as a family member death (p=0.003)

A family member in jail (p=0.019)

- fisical abuse (p=0.003)

Second stage.

- problems related with authority, changes in the couple relationship and being changed To another school (p=0.008)

End of a couple relationship (p=0.019)

- loss of children custody (p=0)

Third stage.

On the third stage anything that breaks the balance such as:

- changes in life situations (p=0.030)
- mental health of a family member (p=0.029)
- loss of children custody (p=0.001)
- change of residence adress (p=0.021)

**Conclusion** is that the significance of the psycho-stressful factors on suicidal behavior or suicidal attempts is different depending on the development stage.

## **WPA-0167 WHAT IS "NORMAL"? A PHOTO VOICE PERSPECTIVE OF YOUTH DIAGNOSED WITH A MENTAL HEALTH ISSUE**

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**Background:** The stigma of mental illness is implicated as the main reason young people and their caregivers avoid or delay accessing mental health services, or withdraw prematurely from treatment. The implications are serious including exacerbated mental health issues, loss of life through suicide, and strained family relationships. **Aim:** In this paper, the outcomes of a participatory action research project are presented in which seven (n=7) youth, fourteen to seventeen years old, diagnosed with a mental illness conducted a photo voice initiative to answer a research question they thought was important based on their lived experiences. The question was: what was "normal" mental health in children and youth?

**Methods:** As a qualitative, arts-based method, the photo voice consisted of three steps. First, each youth was provided with a camera and took photographic images that represented answers to the research question. Once the photographs were developed, the second step involved the youth preparing individual explanations of how the images answered the question. Third, a focus group discussion was facilitated in which each youth presented their images and explanations to the youth group. The discussion focused on analyzing the similarities and differences between the images/explanations.

**Results:** From the lived experiences of youth diagnosed with a mental illness, "normal" mental health emerged as an ambiguous and shifting standard that the youth were acutely aware of being compared against. Despite their extensive involvement with the child and youth mental health system, "normal" mental health was what they were told they did not have without being explained what was "normal".

**Conclusions:** The outcomes suggest that current stigma models fail to capture the complexity of the prejudice and discrimination encountered by young people living with a mental health issue. The implications for researchers and practitioners are discussed. Funding was provided by the Mental Health Commission of Canada



## **WPA-0211 THE IMPACT OF SENSE AND MEANING TO THE CENTRAL AUDITORY PROCESSING**

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**Background:** The MMN is sensitive to changes of auditory-physical properties. However, also changes in abstract features like wordforms are reflected. - Recent studies also showed a MMN2 within ca. 220-400 ms after stimulus onset. Looking at word forms, some authors speak of a mismatch occurring whenever lexical semantic processing takes place.

**Aims:** Looking to SLI, we wanted to know whether also semantic learning affects the central auditory processing.

**Methods:** In a classical oddball-paradigm, we offered 29 SLI children and 32 normal children (age: 5-9 years) pseudo-words and words like "noma" - "foma" or "mappe" (engl. "briefcase") - "sappe". Some of the pseudo-words were first connected with a meaning (telling a story or non-verbal conditioning).

**Results:** A comparison of the amplitudes in the processing of pseudo-words and the processing of real words (both as deviants - standard stimuli were always pseudo-words) showed no significant differences for the MMN nor the MMN2. However, in those pseudo-words that had been associated with a meaning (both types: telling a story and non-verbal conditioning), the normal children showed a significant reduction in the amplitudes of the MMN and the MMN2; in addition, the differences in the MMN2 were much larger than in the MMN.

**Conclusions:** We interpret the decrease of the amplitudes in normal children as a decrease of the processing effort, which facilitates the learning of new words. This learning mechanism is lost later. In addition to typical auditory processing deficits, this mechanism, important for language acquisition, is also impaired in SLI.

## **WPA-0278 SYSTEMIC FAMILY THERAPY AND PSYCHOGENIC ASTASIA – ABASIA IN PREADOLESCENT GIRL – CASE REPORT**

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**Introduction:** Astasia is the inability to maintain an upright position independent body in the absence of muscle weakness or loss of sensitivity. Abasia is described as the inability to walk or uncoordinated walking, while preserving the mobility of the lower limbs. Aim of the case report is a presenting importance of family functioning in genesis of symptomatic behavior, and effectiveness of systemic family therapy.

**Case report:** A thirteen-year patients with a first episode of disorder independent of walking and standing admitted to the Department for child psychiatry. The clinical picture suited to psychogenic movement disorders by type astasia-abasia resistant to supportive therapy and pharmacotherapy. The child was member of rigidly enmeshed family system, considering the high average cohesion scores and the low average adaptability scores on FACES III. Girl and her parents were included in eight systemic family therapy sessions for two months and after the changing family circumstances astasia-abasia were mainly disappeared.

**Conclusion:** Case of psychogenic astasia-abasia in children is a contribution to a better understanding importance of family functioning in creating symptomatic children behavior and also efficacy of systemic family therapy.

## **WPA-0257 NEUROPHYSIOLOGICAL CRITERIA FOR EARLY DIAGNOSIS OF AUTISM**

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The purpose of this research is to study EEG features of autistic children compared with children with schizophrenia and healthy children at the age of 3 to 15 years.

The results of computer processing of EEG files showed that the main EEG syndrome of autism is the total reduction in the relative power of the alpha activity in all regions of the brain in patients with severe enhanced activity of beta2-range in the central, temporal and parietal-occipital regions. The relative alpha-power was reduced by 3-4 times, and the beta-2-power was 1.5-2 times higher than in healthy children. In all age groups a pathological computer sign was observed: beta activity's focusing, which occurred in 50% of autistic patients and among healthy children - only 3%.

An important EEG feature was the lack of power peak in 4-30 Hz range. For the differential diagnosis of autistic children EEG were used the following three features: the absence of the peak power of the fundamental rhythm, the presence of a pathological focus beta1-and beta2-activity, index of the alpha rhythm of less than 15% for children under the age of 4 years, and the index of the alpha rhythm less than 20% for children aged 4 years and older. The following diagnostic rule was applied: the presence of at least one of these symptoms indicates the presence of autism. When using this rule, the EEG of children with autism at the age of 3 to 15 years has been recognized correctly in 90% of cases.

## **WPA-0326 EFFECTIVENESS OF COGNITIVE BEHAVIOURAL THERAPY VERSUS TREATMENT AS USUAL IN CLINICALLY DEPRESSED ADOLESCENTS WITHIN ROUTINE CARE AND COMORBIDITY AS MODERATOR.**

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Depression in adolescents is a huge societal problem because of the prevalence, the burden of the illness, the chronicity, the comorbidity and the high number of suicides. Therefore, an effective psychological intervention for the clinical depression seems necessary. International studies have shown that CBT is effective in reducing depressive symptoms. Aim of the study is to test the (cost-)effectiveness of a specific CBT program, the D(o)epressie course, for clinically depressed adolescents. Potential moderators (gender, age, comorbidity, e.g.), mediators (negative automatic thoughts, cognitive emotion regulation, e.g.) and non-specific treatment variables (therapeutic alliance, client expectancy, e.g.) are also assessed. In this multi-centre randomized controlled trial, individual CBT will be compared to treatment as usual including medication, IPT etc. In total, 100 adolescents will be included and 4 assessments; pre-test, post-test, follow up after 6 months and 1 year will take place. This trial will be the first to compare CBT with TAU under rigorous conditions within routine care and with a complex sample. The study addresses questions raised in research and clinical practice. Until now, the pretests and several posttests have been executed. In April 2014, all posttests will be available. In this presentation preliminary effectiveness outcomes will be discussed. Also, comorbidity as a moderator will be presented.

Finance: Dutch governmental organisation ZONMW for health research and development, grant number 157004005 Trialregistration: [www.trialregister.nl](http://www.trialregister.nl) TC 2676

## **WPA-0269 IF WE DON'T ASK, THEY WON'T TELL: RAPID ASSESSMENT OF PEDIATRIC PSYCHOLOGICAL TRAUMA**

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**Background and aims:** Psychological trauma is common in inner city children; yet, even when severe, it is not often identified at the child's primary point of contact with health care: the Emergency Department (ED).

We will field test a trauma screening process for children presenting to a busy pediatric ED in Los Angeles. Once identified, children may be referred for appropriate interventions. We will measure the acceptability of this process both to families and ED staff.

**Methods:** We will report on efficacy of the newly developed Rapid Assessment of Pediatric Psychological Trauma with English and Spanish versions for caregivers and children. As a screener, questions are maximally sensitive, but not specific. Therefore, any affirmative response will be followed up to prevent false positives and determine the nature and extent of trauma. Additionally, the instrument assesses the degree to which all traumas taken together cause functional impairment.

**Results:** Identifying psychologically traumatized children at their point of contact with the health system may provide an efficient means to refer those children requiring mental health service for treatment otherwise, they might remain unrecognized and untreated.

**Conclusion:** Untreated psychological trauma can have an impact over the entire lifespan. Improving its detection in children may allow appropriate treatment and prevent serious consequences.

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## **WPA-0283 THE MULTIMODAL PSYCHOCORRECTIONAL SYSTEM OF DISADAPTATIVE CONDITIONS IN CHILDREN AND ADOLESCENTS WITH MENTAL AND BEHAVIORAL DISORDERS**

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The international charity Foundation «Alexander Feldman's Fund» in the territory of Feldman Ecopark creates the Center of psychosocial rehabilitation for children and adolescents with psychological, emotional and behavioral disorders. The Program of psychosocial care jointly developed by the Department of Psychotherapy of KhMAPE and the National League of Psychotherapy and Psychosomatic Medicine Psychology of Ukraine (NLPU).

### **Purpose**

Develop a medical and psychological treatment system, support and prophylaxis disadaptive psychological disorders in children.

### **Methods**

Diagnostic and advisory work, correctional work, rehabilitation work, social and psychological work, methodical work.

### **Results**

After the medical-psychological adjustment in four study groups (children with F90.0 \* 1<sup>st</sup> group, F94 \* 2<sup>nd</sup> group, F81 \* 3<sup>rd</sup> group and F82 \* 4<sup>th</sup> group) the following results were obtained: Positive "+" marker of social adaptation (the stabilization of family relationships, positive academic performance and normalization of inter-personal relationships with peers) in 1<sup>st</sup> group was 74,5%, in 2<sup>nd</sup> group \* 86,0%, in 3<sup>rd</sup> group \* 50,0% and in 4<sup>th</sup> group \* 48,1%.

### **The conclusions**

1. The system of medical and psychological support for children with mental and behavioral disorders.
2. The basic criteria for the effectiveness of medical and psychological treatment: the formation of a constructive type of family relationships and social adaptation.
3. Testing results on the primary stage of the work of the Center has demonstrated its effectiveness in 74.5% of children diagnosed with F 90, in 86.0% - with F 94, in 50.0% - with F 81 and in 48.1% with F 82, who underwent medical and psychological correction.

## **WPA-0412 METABOLIC BIOMARKERS AMONG AND CHILDREN WITH AUTISTIC SPECTRUM DISORDERS IN LAGOS, NIGERIA**

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Persons with autism have been found to have abnormalities in related and overlapping areas such as oxidative stress, decreased methylation capacity and limited transsulfation. Metabolic errors related to autism include errors of carbohydrate metabolism, errors of peptide metabolism, purine and pyrimidine disorders, and malabsorption. Impaired methylation and glutathione metabolism have been implicated in the genetic studies of autism. MTHF, the enzyme involved in the final methylation step of folic acid, producing 5-methyltetrahydrofolate.

Study aim was to evaluate the levels of plasma concentrations of metabolites (methionine, total homocysteine, cysteine, S-Adenosyl Methionine, S-Adenosyl Homocysteine, adenosine, cystathionine) in the methionine transmethylation and transsulfuration pathways in children diagnosed with autism.

### **Methods**

Fifty study participants aged 14years or less, were selected during routine clinic visits at 2 different Child and Adolescent Psychiatry Units in Lagos, Nigeria. A Diagnosis of Autism was confirmed using the Diagnostic and Statistical Manual for Mental Disorders fourth Edition (DSM IV), a diagnostic interview, the MCHAT questionnaires and the autism Quotient questionnaire. There were 50 age matched controls with no known neurodevelopmental challenge selected from the paediatric clinics in LUTH. Institutional Ethical approval and parental consent were obtained before study commenced. 5ml of fasting blood samples collected from each child and biochemical biomarkers determined included : methionine, total homocysteine, cysteine, S-Adenosyl Methionine, S-Adenosyl Homocysteine, adenosine, cystathionine.

### **Results, Discussion and Conclusions**

Preliminary data from this currently ongoing research are to be presented.

## **WPA-0436 EPIDEMIOLOGY OF ANXIETY DISORDER AMONGST HIGH SCHOOL STUDENTS (GRADE 5 TO 10) OF AN URBAN-METRO COMMUNITY IN MUMBAI**

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**Background.** Anxiety disorders constitute the most common disorders of childhood and adolescence, which has marked effect on a child's development. Studies show its prevalence ranging from 20-to-25% in general population. Psychosocial and environmental factors are associated with pattern and prevalence of anxiety disorder. It has impact on school performance and productivity. Not much research has been done to explore anxiety disorders in school going adolescents in urban population. We examined high school students in a population study for anxiety disorders.

**Methods.** The study was conducted in the catchment area of a general teaching hospital in Mumbai. Study design was crosssectional along with a clinical assessment done by trained mental health clinicians. Data was recorded in a structured interview format and analyzed using SPSS.

**Results.** We conducted a survey of 450 students and conducted clinical evaluation of 111 students. Results showed that 36.7% students had DSM-IV anxiety disorder. Parents and students were successfully able to report anxiety as confirmed by clinical diagnosis; these students were young (mean age 11.2 years), with significant female predominance (female, 64.7% and male, 35.3%, ratio 1.8:1). Presence of anxiety was not associated with family type; language spoken or level of education in the parents. Interestingly more than 50% had no siblings. Commonest diagnosis was generalized anxiety disorder (17.8%) followed by social anxiety (15.8%), panic disorder (13.3%), and separation anxiety (5.6%).

**Conclusion.** More than one third high school students in urban metro population of Mumbai suffer from diagnosis of anxiety disorder which was successfully identified by parents.



## **WPA-0450 CORRELATION BETWEEN COMT GENE POLYMORPHISMS AND COGNITIVE FUNCTION IN HAN CHINESE CHILDREN WITH TOURETTE'S SYNDROME**

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**Objective** Gilles de la Tourette syndrome (GTS) is a genetic disorder that can affect the cognitive function of brain, but the genetic basis of this symptom is unknown. So here in this paper we examined the correlation between cognitive function of patients and gene polymorphism.

**Methods** We used polymerase chain reaction (PCR) to examine the gene polymorphism and gene allele in patient. Psychological evaluations, including wechsler children intelligence scale, modified wisconsin card sorting test (WCST), trail making test, visual memory test, stroop test and verbal fluency test, were performed to examine the cognitive function of the GTS patients.

**Results** Subjects with the met/met Catechol-O-methyltransferase (COMT) genotype made significantly fewer perseverative errors on the Wisconsin Card Sorting Test than subjects with the val/val genotype. The patients carrying COMT met allele showed better performance as compared to individuals carrying COMT val allele in delayed memory, WCST errors and perseverative errors. No significant correlation was detected between the cognitive function of GTS patients and the gene polymorphism of dopamine D4 receptor exonIII, interleukin-1 receptor antagonist and interleukin-1 $\beta$  exon 5.

**Conclusion** We found a correlation between COMT met/val gene polymorphism of and the cognitive function of GTS patients.

## **WPA-0470 ASSOCIATIONS BETWEEN IOWA GAMBLING TASK PERFORMANCE, COGNITIVE FLEXIBILITY AND INTELLIGENCE IN ADOLESCENTS WITH ANTISOCIAL PERSONALITY FEATURES.**

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**Objectives:** The aim of the work was to examine the associations between Iowa Gambling Task performance, cognitive flexibility and intelligence in adolescent boys with history of substance abuse and antisocial personality features.

**Methods:** 35 male adolescents age 17 to 18 the students of Youth Resocialization Centre completed Iowa Gambling Test, Wisconsin Card Sorting Test, Raven Test, Edinburgh Handedness Inventory, SCID II.

**Results:** Our results show that there is no association between IGT performance, set-shifting and intelligence in our examined group. However we treat it as a preliminary results because of rather small number of examined subjects. We are planning to continue our work based on the much larger group.

**Conclusions:** There is a lot of evidence suggesting that the decision making processes are rather separable from executive functions and intelligence, but on the other side there is a lot of unexplained data concerning those problems.

## **WPA-0331 TECH CONNECT PROGRAM: AN INNOVATIVE INTERVENTION TO IMPROVE TREATMENT ADHERENCE FOR ADOLESCENTS WITH MOOD DISORDERS**

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**Background and Aims:** A third of adolescents who start mental health treatment for depression prematurely dropout. Poor adherence remains a fundamental obstacle to mental health outcomes and treatment effectiveness. A core underlying assumption of most, if not all, evidence-based psychosocial interventions is that clients will fully and actively engage in the treatment protocol; however, youth are among the least adherent populations. Tech Connect was developed as an augmentative intervention that is readily individualized to increase adherence of adolescents with depression who are at high risk of treatment dropout from community-based treatments.

**Objectives:** To test the feasibility and acceptability of the Tech Connect program as a proactive, innovative, and simple to implement package of manualized between-session contacts (e.g., SMS texting, phone calls) and structural supports (e.g., transportation, scheduling).

**Methods:** A RCT with depressed youths (13-17 years) and parents were randomized to Tech Connect Program plus standard clinical care (treatment condition) or standard community-based mental health care (control condition). Standardized measures (assessing mental health symptoms and outcomes, functioning, health beliefs, family involvement, adherence, therapeutic alliance, and treatment fidelity) were conducted at baseline, after 4-sessions, post-test (after 8-sessions), and 3-months follow-up.

**Results:** Findings demonstrate that Tech Connect Program as feasible and acceptable to clinicians, youth and their families.

**Conclusions:** Empirically-supported and evidence-based mental health interventions require adherence to treatment protocols. The Tech Connect Program is a novel, technologically-driven intervention designed to address this gap by improving engagement and adherence to treatment. More research is needed to evaluate effectiveness with adolescents and other populations.

## **WPA-0351 CLINICAL STUDY OF BEHAVIORAL PROBLEMS AMONG CHILDREN WITH TYPE 1 DIABETES MELLITUS (T1DM) IN MINIA GOVERNORATE, EGYPT**

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**Background:** Egypt has an intermediate incidence of T1DM (5% - 9.99%) between Arab countries. Diabetes impacts the life style, personality, overall emotional & physical well being of the child. Children with a chronic disease are twice as likely as healthy children to have a psychological problem.

**Aim of the study:** To trace out the frequency of behavior disorders among children with T1DM and to correlate them with different demographic and metabolic control.

**Subjects and Methods:** This study was a cross sectional study carried upon fifty children with T1DM who attended Diabetes outpatients' Clinic, Minia University Children's Hospital, Minia governorate. Another fifty children age and sex matched from the same families were taken as a control group. Diabetic patients were subjected to: complete history taking, clinical examination, laboratory investigations. All studied children were subjected to the Revised Behavior Problem Checklist (RBPC) to rate problem behavioral problems.

**Results:** Based on RBPC ratings: the frequency of behavioral disorders was significantly higher in diabetic children than the control ( $P=0.001$ ). Motor excess was the commonest disorder followed by socialized aggression and attention problems. Males were more significantly affected than females. The poor controlled patients significantly had different behavioral disorders.

**Conclusion:** Behavioral problems were significantly presented in children with T1DM.

## **WPA-0393 MEDIATING EFFECTS OF DEPRESSION AND ANXIETY ON THE RELATIONSHIP BETWEEN BULLYING INVOLVEMENT AND PAIN PROBLEMS AND SEX DIFFERENCES AMONG ADOLESCENTS**

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**Background and Aims:** Although research has found the significant association between bullying victimization and pain, the relationship between bullying perpetration and pain has been seldom examined. The mediating effects of depression and anxiety on the relationships between bullying involvement and pain and the moderating role of sex among adolescents are unknown.

**Methods:** This study aimed to examine the mediating effects of depression and anxiety on the relationships of bullying victimization and perpetration with pain and the moderating role of sex among adolescents in Taiwan. 4,976 students of junior and senior high schools completed the questionnaires. Bullying victimization and perpetration, pain problems, depression, and anxiety were assessed. The mediating effects of depression and anxiety on the relationship between bullying involvement and pain problems were examined by the Sobel test. The moderation effects of sex on the mediating roles of depression and anxiety were tested by the multiple-group structural equation model (SEM).

**Results:** Both depression and anxiety were significant mediators of the relationship between bullying victimization and pain problems among adolescents. Depression was also a significant mediator of the relationship between bullying perpetration and pain problems among adolescents. Sex had a moderating effect on the association between bullying victimization and pain problems and on the mediating role of depression on the association between bullying victimization and pain problems.

**Conclusions:** Medical and educational professionals should survey and intervene in depression and anxiety and take sex difference into consideration when managing pain problems among adolescents involved in bullying.

## **WPA-0457 ADOLESCENTS' MENTAL HEALTH ISSUES: KNOWLEDGE AND ATTITUDE OF ADOLESCENT GIRLS FROM RURAL INDIA**

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**Background and Aims:** With the recent increase in various mental health issues among adolescents in India, it seems necessary to look into the problem through an adolescents'-lens, to know about how much aware they are about the various changes, challenges and problems typical of adolescence.

In this background, the current study was planned to prepare and validate a Bengali questionnaire to assess knowledge and attitude of adolescents about the various mental health issues related to them, and to conduct a pilot study with this questionnaire.

**Method:** It was a cross sectional study conducted on adolescent school girls (N=107, 12 to 18 years age) from rural background of West Bengal. A 13 item Bengali questionnaire was constructed, validated and administered on the subjects. Statistical analysis was done using SPSS (16<sup>th</sup> version).

**Results:** Most of the items had good test re-test reliability. Mean age of the population was 13.09 years. Three knowledge based questions had more correct responses (50.5%, 52.3%, 50.5%) and one had 72% incorrect responses. Majority of the subjects recognised problem behaviours, expressed an helping attitude, tended to seek help from parents and thought sharing worries with others and spending time with friends could make them happy.

**Conclusions:** This questionnaire appears reliable to assess knowledge and attitude of adolescent girls. There is need to inform adolescents about various mental health issues. Attitude to help and a sense of cohesion was conspicuous in this population. A larger and more inclusive study needed to generalize the findings.

## **BULLYING AND QUALITY OF LIFE IN SCHOOLS: TRAINING IN COPING STRATEGIES IN THE CLASSROOM AND APPRECIATION OF BASIC EDUCATION TEACHERS IN DIFFERENT REGIONS OF COLOMBIA. 2012-2013**

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### **Target**

Coping skills training in the classroom and appreciation of basic education teachers in different regions of Colombia. 2012-2013.

### **Method**

It is a study of type action research, Cross Section.

### **Justification**

Bullying and school bullying includes acts which are intended to intimidate, scare or hurt systematically and repeatedly to one or other of whom has some power. He holds an intimidating the weaker who is chosen. It can be described in childhood, adolescence and adulthood in various institutions, groups, cultural and other contexts. School bullying has become an issue of international concern in the last 20 years because of the increasing prevalence and its deadly consequences. This harassment is different from other forms of violence because it represents a pattern of repetitive rather than an isolated event behavior. The victim is accessed when you are especially vulnerable and defenseless. The diversity of studies reflects the complexity of the problem and concern of all parties involved to have clear and effective tools for intervention.

Population Teachers of different Colombian regions attending the activities of community education program that offers specialization in Child and Adolescent Psychiatry at the University Forest in partnership with the Committee on Child Psychiatry of the Colombian Association of Psychiatry ACP.

### **Results**

Understanding the effect of bullying on the quality of life of the different actors of the educational community and build masters such an intervention method and present the educational community.

### **Conclusions**

The school occupies a unique position to break the patterns and the circle of violence and intimidation or bullying situations. It is important to assess the school environment, relationships between managers, administrative staff and because children have a social learning through observation, role play and positive reinforcement of behavior. Strong leadership, good treatment, clear rules (rules), immediate sanctions and a warm, can prevent and reduce violence in schools. Unfortunately in most cases, schools looking for a quick solution to the problem and expel the offender thinking that this is an effective solution. This achieves that the problem persists and worsens behavior transferring the problem to another school or community.

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## **HIV/STI PREVENTION FOR YOUTH WITH BEHAVIORAL HEALTH PROBLEMS (YBHP) - TALES OF LOW, MIDDLE, AND HIGH-RESOURCE SETTINGS: ITABORAI, BRAZIL; AND POUGHKEEPSIE, PROVIDENCE AND NEW YORK CITY, USA**

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**Background:** Youth with Behavioral Health Problems (YBHP) are especially vulnerable to HIV/STIs<sup>[1-6]</sup>. Settings providing services (health, mental health, substance abuse, juvenile justice system) are ideal for HIV/STI prevention; lack of training and policies supporting prevention are the norm globally. Using similar methods with YBHP, their caregivers and their providers from diverse settings in Itaborai (250,000 inhabitants), Brazil, and Poughkeepsie (30,000 inhabitants), Providence (183,000 inhabitants) and New York City (NYC; 8,500,000 inhabitants), USA, we identified similarities and differences of the drivers of YBHP sexual risk behavior (SRB); family relationship strengths and gaps; and institutional challenges.

**Methods:** We conducted in-depth interviews (IDI) and/or focus groups (FG) with YBHP ages 13-18 within 18 settings in: a) Itaborai (IDI n=9; 5 FG n=30), teens' caregivers (IDI n=9; 5 FG n=35), and providers (IDI n=10; 3 FG n=34); b) Poughkeepsie (IDI n=24), teens' caregivers (IDI n=24), and providers (IDI n=12); c) Providence (5 FG n=40), teens' caregivers (5 FG n=40); and d) NYC (IDI n=14; 4 FG n=17), teens' caregivers (IDI n=14; 4 FG n=15), and providers (IDI n=4; 3 FG n=13).

**Results:** Despite *differences*: a) In resources, number/qualifications of professionals (NYC > Providence > Poughkeepsie > Itaborai); and b) Stronger community, familism and religion in Itaborai and Providence, we identified *similarities* among: Youth: a) Peer norms drive SRB; b) Common histories of sexual abuse increase SRB; and c) Talk openly with peers, but reluctant to talk about sex/drugs with caregivers. Caregivers: a) Concern about their teens' SRB; b) Lack comfort/skills to talk about sex with them; and c) Experience loss of control and burnout about monitoring and discipline. Settings/providers: a) No explicit HIV/STI prevention policies; and b) Seek training in engaging, interactive, and explicit HIV/STI prevention. All perceived: a) Peers and family play a role as major change agents; and b) Feasible to offer family-based HIV/STI prevention in these settings.

**Conclusions:** Families attaining communication and cooperation skills is a powerful means of reaching YBHP with safer sex messages in diverse cultures and contexts. Family-based HIV/STI prevention with YBHP is being piloted/tested in settings in these cities with different resources. These findings have implications for vulnerable YBHP in low, middle and high-income countries.



## **AUTISM SPECTRUM DISORDER AND SUBSTANCE USE IN YOUTH**

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### **Background:**

The prevalence of Autism Spectrum Disorder (ASD) has increased greatly over the past several years. Substance use is a major health concern in the United States in persons ages 15-24. Our objective is to examine the association between the presence of ASD and substance use in adolescents and young adults.

### **Methods:**

An extensive review of the literature was completed. The databases that were searched include PubMed and Medline, and the keywords used were autism spectrum disorder, autism, substance use, abuse, drugs, alcohol, youth and adolescents. Little research exists regarding the co-occurrence of ASD with substance use disorders. Case reports of three autism spectrum disorder youth treated in an intensive outpatient substance abuse treatment program are reported.

### **Results:**

Youth with ASD represent a unique and at times challenging population. Traditional substance use treatment modalities rely on participating individuals to have certain skills that individuals with ASD lack or have difficulties with. Adolescents and young adults with ASD present a number of possible treatment barriers to effective substance use treatment including difficulties sustaining attention, social and adaptive-skill deficits, restricted interests, limited cognitive and communication abilities and limited insight.

### **Conclusion:**

This is the first study addressing the relationship of youth with autism spectrum disorder and substance use. We present three vignettes and highlight some of the unique challenges that ASD youth encounter when they seek treatment for substance use. Adolescents and young adults with ASD may be resistant to participation in conventional psychosocial interventions and may require additional interventions not necessary for the non-ASD population.

## DEVELOPMENT AND VALIDATION OF YOUTH MENTAL HEALTH SCREENING TOOLS IN CAMBODIA

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In low and middle-income countries like Cambodia mental needs are high. Especially, the needs of children and youth often remain underserved. In order to identify those at risk of mental health problems those in need of help and eventually to help those in need, screening methods are useful. In order to be effective, a screening tools should be short and fit the local context. This study aims at constructing and validating two screening tools to identify Cambodian youth at risk of mental health problems: one focusing on daily functioning and the other one on psychosocial distress.

### Method

Mixed methods were used following the methods to construct similar instruments in other low income countries. . First, qualitative methods were used to develop the tools: focus groups were held with parents, youth (both primary and secondary school) and teachers in both rural and urban areas of Cambodia. Further, youth kept diaries during 2 weeks. For psychosocial distress screener (PSDS) the probes of an existing tools were made Cambodian specific, for daily functioning a Cambodian tool was constructed. Second, the tools were validated: Screening 1,500 Cambodian Youths in urban and rural areas, both primary and secondary school to test for internal consistency, and content validation. In addition clinical in-depth interviews were held with 150 children and their parents.

### Results

For the PSDS the Cambodian probes for stressfull events were flood, lightening, fire, serious traffic accident, serious violence, robbery, being separated from parents, death of someone, and serious illness. For signs of distress the probes were being scared, hopeless, trembling, absent minded, faint, don't want to talk, cry, and get angry easily. Regarding daily activities, and 11-item instrument was developed covering self-hygiene, eating, helping your parent(s)/caregiver in the house, helps out at the business, spending time with friends, school, spend time with family, spending or enjoying free time on their own.

### Conclusion

The stressful life events, psychological distress and daily activities for Cambodian youths were slightly different from other low-income countries, suggesting screening methods that fit the cultural context should be used. At the conference, the results of phase 2 internal and construct validity will be presented.



Topic

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# Conflict Management and Resolution

abstracts - volume 2

## **SYSTEM FOR DATA MANAGEMENT OF PSYCHIATRIC PATIENTS OF THE HEALTH SERVICE NETWORK**

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Current guidelines about psychiatric assistance require a network of extra hospital services, adequacy and humanization of specialized hospitals and human care, aiming to reducing hospitalizations of the psychiatric patients in the Brazilian Health System. Thus the **OBJECTIVE** is to develop an information system that allows the monitoring of psychiatric patients in the health system. **METHOD** - We have developed a software, called SISAM 13, through prototyping, client-server web architecture, programming languages PHP, HTML, CSS and jQuery, relational database and database management system MySQL. **RESULTS** - With this system, the patient can be managed and monitored by professionals since entering the network at any basic health unit until his discharge with sociodemographic and clinical information. For each status, professional sets and records prescriptive and monitoring actions. The software also contains information about available beds and regulation of patients (source, request, responsible doctor, therapeutic management and destination). It is also possible to generate reports on hospital indicators improving the capacity of the network connection and monitoring and continuous evaluation by managers. Since August 2012, the system has been used in all the mental health services of the Regional Health Department XIII, in Ribeirão Preto, Sao Paulo, Brazil. **CONCLUSIONS** - SISAM 13 information system is a management tool integrating and monitoring network services, promote access and equity in assistance to mental health patients.

## **JOINT CRISIS PLANS AND PSYCHIATRIC ADVANCE DIRECTIVES - NEW WAYS OF REALIZATION IN GERMANY**

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### **Objectives**

In many European countries [1], patients with serious psychiatric disorders are offered a standardized care plan. Crisis intervention plans are often a (mandatory) part of a standard program. Severe psychiatric disorders may have the effect that the persons are not able to decide adequately, especially concerning aspects of their medical treatment [2]. In cases of a psychiatric emergency or crisis this can cause complex conflicts, for example regarding the necessity of an admission to a psychiatric department or psychopharmacological treatments. In Germany, psychiatric advance directives and joint crisis plans are used rarely until now, the scientific evaluation of these plans is limited [3].

### **Methods**

In cooperation with the Clinical Ethics Committee of the University Hospital of Göttingen, former patients of the Department of Psychiatry and Psychotherapy, University Göttingen, Germany and members of families of these patients we developed a new concept of a joint crisis plan, aiming at establishing a cooperative, triologic model, to improve critical situations and to activate and enhance autonomy of psychiatric patients.

### **Results**

The first experiences with the newly implemented joint crisis plans are encouraging. In our study patients and psychiatrists will be included. Conditions, contents and results will be evaluated.

### **Conclusions**

This approach is a setting for a modern, innovative psychiatric crisis intervention and a concept for deescalating critical situations under the specific aspect of a scientific evaluation of effectiveness, practicability and acceptance of such conflict solving methods.

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## **TYPIFYING AND CHARACTERIZING SUICIDE AND ITS DYNAMICS OF PROGRESSION TOWARDS COMPLETION; A MODEL**

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Lot of the people has suicidal ideation but few succeed. This behavior does not direct to it final destination. It has to proceed in succession. The aim of this study is to establish the successive stage and patternize the suicide in different form, require further statistical approval. The postulated model has four major component that pass through them as a) ideation „<sup>3</sup> b) threat „<sup>3</sup> c ) attempt --.> d ) completion . Ideation may be situational or persistent .Threat can be seen without self harm or with self harm if it occurs with self harm can be evident with self mutilation or deliberate self harm or self throttling . In case if attempts are taken can be identified as true or threat. If truly taken with ideation which may be situation or momentarily with or without idea or accidental to proceed further to complete or incomplete .Completion of suicide may associated with mental illness a) with psychotic symptoms b) without psychotic symptom c) under distress d) under substance influence e) adjustment problem & associated family conflict 2) without mental illness a) under serial forced circumstance b) accidental. These are the components that are identified in clinical practice. The only survivors are negotiable and those who are psychiatrically ill are assessed with precaution but those who are free from mental illness remained untouched, need further approval for wide acceptance .

**KEY WORDS** ;V Ideation , Threat , Attempt , Completion , Mental illness , Substance use

## WHY AND HOW PSYCHIATRISTS CAN COPE WITH TERRORISM

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**Objectives:** to 1) show why terrorism requires psychiatrists' involvement; 2) demonstrate what psychiatrists can do/have done about/for terrorists and their victims.

**Methods:** Data were gathered through a) personal experiences in Pakistan (Saboon has detailed neuropsychological data on about 200 youths captured by the army in liberating the Swat Valley in 2009), the USA, and other countries, b) reports of colleagues, and c) published reports, which have become voluminous since research funding was greatly increased after 2001. Terrorists and their victims have provided many personal narratives. Studies of youth gangs and criminals are relevant.

**Results:** Terrorism here is defined as acts against noncombatants that would be considered war crimes. Psychiatrists should be involved not only for the reasons any physician should respond, but for the special reason that terrorists produce psychiatric disorders amid the emotions they believe will help their causes. Terrorism often wears a religious face, but the more successful antiterror programs involve religion only as one, not the sole, modality. Programs for victims have benefitted from the massive investment in studying posttraumatic stress disorder (PTSD), as well as anxiety and depression. Disaster psychiatry research has emphasized the importance of avoiding premature medicalization of people's reactions as well as the distinction between natural, nonrecurring events versus ongoing anxiety posed by the possibility of repeated acts of terrorism perpetrated by people one may have trusted until then. Although not used widely, biomarkers for violence may be helpful in predicting risk; many of our Pakistani sample have abnormal EEGs. Cognitive behavioural therapy and group dynamics correlate well with the developments of distorted thinking reported by terrorists as they became involved and came out of terrorist groups. Involvement with primary and secondary education is key.

**Conclusions:** Programs that emphasize critical thinking and involvement with the whole person have shown some success.

## **TOWARDS REDUCING THE EMPLOYERS' ANXIETIES ABOUT EMPLOYING PEOPLE WITH DISABILITIES**

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Employment is playing a vital role in our lives since it presents a way for our social inclusion and a source for gaining the necessary financial resources needed for our well-being. This statement is viable for normal people as well as disabled people. Nevertheless, studies have shown that negative attitudes regarding the employment of disabled people are still noticed from employers. This descriptive study investigates the anxieties shown by employers about hiring individuals with disabilities. In reviewing the literature, it will attempt to answer questions about what are the concerns of employers when it comes to hire people with disabilities? This study will help decision makers to increase the level of awareness about such social problem as the employability of disabled persons. Laws should be clear and understood by employers and incentives are to be considered by companies that hire such kind of employees.





Topic

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# Dementia, Delirium and Related Cognitive Disorders

abstracts - volume 2

## CONVERSION FROM MILD COGNITIVE IMPAIRMENT TO DEMENTIA IN COMMUNITY DWELLING OLDER ADULTS IN SINGAPORE

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**Objectives:** There is a paucity of data on conversion rates from Mild Cognitive Impairment (MCI) to dementia in Singapore. We aim to compute the conversion rate in a community dwelling sample and compare biological and psychometric measures between individuals with MCI who convert to dementia and those who do not.

**Methods:** Participants who were diagnosed with MCI were identified from a community based study, the Singapore Longitudinal Ageing Study. Psychometric tests (CDR, MMSE, MoCa, GDS), venous sampling for biomarkers (B12, Folate, Homocysteine) and genotyping (ApoE) were performed for these subjects. A follow up assessment was subsequently conducted.

**Results:** 46 participants were followed up for a mean duration of  $3.5 \pm 1.0$  years. The mean age of participants at baseline was 72.4 years (s.d. = 7.0) and 26(56.5%) were females. 37 (80.4%) of the participants were Chinese. They received 2.1 years of education (s.d. =2.7). The mean annual conversion rate was 7%.

Comparison of the baseline demographics, psychometric measures, serum biomarkers and genotype between converters and non-converters did not reveal any significant differences. The lower prevalence of depressive symptoms at baseline is a possible explanation for the lower conversion rate. There was an absence of ApoE4 genotype in the converters, suggesting that genotyping for the ApoE4 allele may be of limited value for predicting dementia in Chinese populations.

**Conclusions:** Our results are consistent with previous research conducted in Asian populations. However, certain noteworthy deviations from current knowledge highlight a need for more epidemiological and longitudinal studies to identify predictors that are specific and relevant to Asian populations.

## METABOLIC DISEASES WITH PSYCHIC DISORDERS DURING PREGNANCY

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**Objectives:** meet the metabolic affectation that can occur during pregnancy and can cause temporary insanity.

**Methods** Literature review and research articles in the MEDLINE database, Cuiden, PubMed, Cochrane, SciELO, studies in recent years, last five years, data limits: human, women, Spanish and English Core clinical journals, Nursing journals, History of Medicine, Systematic Reviews, MEDLINE, PubMed Central, Adult: 19-44 years.

**Results:** Within the prognostic classification of dementia is the irreversible and reversible, these are not exclusive in the elderly, because some metabolic or deficiency also may be affected in pregnancy. The medical community uses the term "insanity" to describe a form of mental decline. These states of dementia are caused by abnormal organic processes.

**Conclusions:** Deficiency of vitamin B12 and folate is rare that appear related to pregnancy and lactation if your needs grow. The liver gravidarum may appear as a complication of hyper emesis Gestosis pre-eclampsia, acute fatty liver, cholestasis of pregnancy, and the most common viral hepatitis infection. Higher levels of uremia in pregnancy can cause dementia are associated with hemolytic uremic syndrome that combines hemolytic anemia, thrombocytopenia and renal failure. Porphyria, though a very rare disease, drastically altered in pregnancy. Women with Wilson's disease who desire pregnancy should be evaluated liver function and copper levels. Hypothyroidism and rarely by pregnancy related anovulatory infertility with fertility treatments becomes possible. Symptoms: In the most common in pregnancy are temporary loss of memory of recent events, inability to understand a problem, confusion, difficulty with concentration, distrust and unusual or inappropriate behavior.

## VASCULAR RISK FACTORS OF MILD COGNITIVE IMPAIRMENT AND ALZHEIMERS DISEASE

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**Introduction:** Introduction. Alzheimer's disease (AD) is the leading cause of dementia and is characterized by a progressive deterioration of cognitive functions. Although the presence of disease and vascular risk factors were considered exclusion criteria for the clinical diagnosis of AD; recent studies have suggested that this concurrency, so common in the elderly, has a causal relationship.

**Objectives:** Determine and characterize the behavior of mild cognitive impairment (MCI) and AD and its association with vascular risk factors in people  $\geq 60$  years of the population served by a clinic in the town Plaza, Havana.

**Participants and methods:** A study was conducted in two phases, the first one descriptive, cross-sectional, door to door, aimed at all persons aged  $\geq 60$  years, served by an office of the Plaza municipality. The second is an analytical, observational case-control study. The sample consisted of 543 patients, who were administered the modified STEPS Instrument surveillance of risk factors of non-communicable chronic diseases, neuropsychiatric test and diagnostic criteria. Patients were classified into three groups: cases with AD (n=39), cases with MCI (n=98) and controls (n=268), for further analysis.

**Results:** The prevalence of dementia syndrome was 11.6% (n=63), 18% (n = 98) for mild cognitive impairment and 7.1% (n=39) for the AD. Compared with controls, patients with AD were more likely to have vascular diseases (odds ratio, 95% confidence interval) (2.2 1.3 to 4.5; p 0.00), Diabetes Mellitus (3.0; 1.5 to 6.3; p 0.000), alcohol consumption (3.0; 1.2 to 4.4 p 5 0.006), hypercholesterolemia (4.5 2.2-9.2; p 0.000), smoking (4.0 1.8-7.3; p 0.000), metabolic syndrome (3.5 1.7 to 7.1; p 0.000), Arterial hypertension (5.2; 2.4-10.0; p 0.000), global cardiovascular risk (4.0 1.9-6.3; p 0.000). On the other hand the physical activity (0.3 0.2 and 0.6; p 0.001) behaved as a protective factor.

**Conclusions:** The study shows that among the risk factors for MCI and AD are cardiovascular risk factors with a strong association. The MCI and AD risk increased with the number of vascular risk factors.

## EVIDENCE FOR AN INTERACTION BETWEEN APOE GENOTYPE, AGE, AND AMNESTIC MILD COGNITIVE IMPAIRMENT

**Objectives** The apolipoprotein E (APOE) gene has been confirmed as the major genetic risk factor for conversion from amnesic mild cognitive impairment (aMCI) to Alzheimer's disease. The present study was aimed at assessing whether there is a specific interaction of APOE polymorphism by the aging process on brain morphology in the aMCI patients.

**Methods** The analysis of gray matter (GM) voxel-based morphometry by T1 magnetic resonance imaging scans were performed in 85 aMCI subjects and 135 healthy controls (HC).

**Results** The aMCI patients had a lower GM volume in the left cerebellum anterior and posterior lobe, hippocampus, and parahippocampal gyrus related to HC subjects. In particular, a significant interaction of APOE genotype by age on GM volume was found in the left calcarine, the left insula and the left medial frontal gyrus in the aMCI patients. In the aMCI patients, the correlations between age and GM volumes on above brain regions confirmed the well-known negative relationship for APOE  $\epsilon 4$  carriers and the significant positive relationship for APOE  $\epsilon 2$  carriers (except the left insula) while no correlations were found for APOE  $\epsilon 3/\epsilon 3$  subjects. Moreover, the reduced GM volume in the left calcarine, left medial frontal gyrus and the left insula was closely correlated with the impairment in visuo-spatial cognition, executive function and episodic memory in APOE  $\epsilon 4$  carriers and  $\epsilon 2$  carriers but not  $\epsilon 3/\epsilon 3$ , respectively.

**Conclusions** These results suggest that the APOE  $\epsilon 4$  and  $\epsilon 2$  alleles have the opposing effects on brain morphology across the spectrum of cognitive aging. Moreover, the interaction of APOE genotype with age-related changes on brain morphology may reflect the increased vulnerability of  $\epsilon 4$ -carriers to the pathology of late-life cognitive decline and the protective effect of  $\epsilon 2$ -carriers in the aMCI patients.

## COGNITIVE IMPAIRMENT IN CHRONIC KIDNEY DISEASE

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**Objectives:** Cognitive functions of patients with CKD were compromised and were associated with poor outcomes. However, the etiologies of cognitive impairment in CKD are still unclear. Plasma homocysteine levels rise in CKD; meanwhile, hyperhomocysteinemia is a known risk factor of cognitive impairment for dementia in non-CKD patients. Meanwhile, patients with CKD have many cardiovascular diseases which are known risk factor of cognitive impairment. However, their association with cognitive impairment in CKD is unknown. It is worthwhile to elucidate the association of these factors and cognitive functions in CKD.

**Methods:** 230 patients with CKD and 92 normal comparisons were recruited. Study participants were assessed vascular risk factors using Framingham Cardiovascular Risk Scale (FCRS) and cognitive functions using comprehensive neuropsychological tests. Fasting homocysteine levels were drawn. The relationships of cognitive functions and risk factors were examined using linear regression model.

**Results:** The results showed patients with CKD had poorer performance in many cognitive domains including memory, information processing speed, executive function, visuospatial function and attention. Patients with CKD had higher homocysteine levels ( $18.1 \pm 6.7$  vs.  $9.9 \pm 3.2$ ,  $p < 0.0001$ ) and FCRS scores ( $16.4 \pm 4.4$  vs.  $13.5 \pm 4.3$ ,  $p < 0.0001$ ) compared with normal comparisons. Among patients with CKD, higher FCRS scores were associated with poor information processing speed ( $\beta = -0.203$ ,  $p = 0.010$ ) and poor executive function ( $\beta = -0.237$ ,  $p = 0.003$ ). Higher homocysteine levels were associated with poor executive function ( $\beta = -0.184$ ,  $p = 0.030$ ), even after controlling for FCRS.

**Conclusions:** Our results showed the cognitive impairment in CKD was associated with higher homocysteine level and higher vascular risk factor. It is important to assess and follow the cognitive function for patients with CKD, especially those with high homocystiene level and vascular factor.

## ADDENBORKE'S COGNITIVE EXAMINATION IN PARKINSON DISEASE IN CZECH POPULATION

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**Objective:** The aim of study is compare results obtained in Addenbrooke's cognitive examination (ACE-R) in a population of patients with Parkinson disease (PD) and healthy control (HC).

**Methods:** Altogether, 103 HC (44 men, 59 women), average age 67.72 years, and 91 patients with PD (57 men, 34 women), average age 64.42 years, participated in the study. All participants achieved the Mini Mental State Examination score of  $\geq 27$  points. We used t-test for independent samples for statistical analysis of the data.

**Results:** We observed statistically significant difference in the total score ACE-R score and its subdomains between HC and PD patients. The total ACE-R score was 92.46 points in the HC group and 86.20 points in PD group ( $p=0.0000000004$ ). In Attention and orientation domain the score was 17.6 points in HC group and 16.8 points in PD group ( $p=0.001$ ). The Memory score in HC was 22.23 points and 19.36 points in PD group ( $p=0.000003$ ). The Verbal Fluency score in HC was 11.80, in PD group 10.31 points ( $p=0.000006$ ). Language score was 25.35 points in HC group, 24.74 points in PD group ( $p=0.0009$ ). Visuospatial functions domain score were 15.48 points and 14.81 points, respectively ( $p=0.0003$ ).

**Conclusions:** This study shows the difference in total score ACE-R and its subdomains between HC and patients with PD. The ACE-R is more accurate for detection of cognitive deficits as compared to MMSE and it takes less time than detailed neuropsychological examination.

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## NONLINEAR RELATIONSHIP BETWEEN AWARENESS AND COGNITIVE DECLINE IN DEMENTIA

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**Objectives:** There is a general consensus that awareness of disease is compromised to some degree in a proportion of people with dementia (PwD), with evident differences across domains of functioning. This study investigates the factors associated with the impairment of awareness in mild dementia.

**Methods:** Using a longitudinal design, 69 people with mild Alzheimer's disease (AD), and their family caregivers were interviewed and reassessed after one year. The dyads completed the Assessment Scale of Psychosocial Impact of the Diagnosis of Dementia (ASPIDD), the Quality of Life in Alzheimer's Disease Scale (QoL-AD), the Mini-Mental State Examination (MMSE), the Clinical Dementia Rating (CDR) scale, the Cornell Scale for Depression in Dementia (CSDD), the Pfeffer Functional Activities Questionnaire (PFAQ), the Neuropsychiatric Inventory (NPI), and the Zarit Burden Interview (ZBI). Univariate and ordinal regression analyses were conducted to examine the contribution of the various factors.

**Results:** The level of awareness of disease presented a significant difference ( $p < 0.001$ ) between baseline and after one year. After one year, there was no change in the level of awareness of disease in 61.8%, whereas 25.4% worsened. However, the level of awareness improved in 12.3%. At baseline, ordinal regression showed that impaired awareness was associated with cognitive function ( $p < 0.05$ ) and ADL ( $p < 0.001$ ). After one year, the predictors of impaired awareness were ADL ( $p < 0.001$ ), low levels of PwD QoL-AD reported by caregivers ( $p < 0.05$ ) and higher levels of caregivers' formal education ( $p < 0.05$ ).

**Conclusions:** At least in the earlier stages of dementia, it should not be assumed that awareness will inevitably decrease as dementia progresses. The results confirmed that awareness and cognition are relatively independent, and showed that in mild PwD awareness is mainly manifested by poor recognition of changes in ADLs.



## **DEPRESSION IN VASCULAR DEMENTIA**

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### **Objectives**

Determine the level of depression in vascular dementia patients.

Indicate laboratory test of lipids, glucose and Magnetic Resonance Image.

Explore medical vascular diseases, and mental status examination.

### **Methods**

A clinical, descriptive, controlled, randomized prospective study was performed on a sample of 40 patients of both sexes from ages 60 to 80 years of the Outpatient Psychiatry Department of the Hospital Plaza de la Salud in Santo Domingo, Dominican Republic with the diagnosis of dementia, where patients suffering from vascular dementia and the level of depression was measured with the Hamilton Depression Rating Scale in the time of three months were chosen. Vascular Dementia diagnosis was determined by MRI and indicated laboratory tests of lipids and glucose. At all times ethical standards were respected with the patients and signed an informed consent.

### **Results**

The sample showed that 53 % were female, as described by the statistics. Depression 100%, 76% hypertension, 62% presented with total cholesterol and LDL, with positive symptoms of mental examination: 100 % depression, 94% insomnia, 94% hypomnesia, moderate depression 53 %.

### **Conclusions**

We conclude the sample were mostly female, presenting increased total and LDL cholesterol and all depressives with more than half had moderate depression.

Patients with VD in this sample had depression, mostly moderate depression. Must be considered by the clinician discard depression in patients with vascular dementia.

## **SCOPOLAMINE, THE ZOMBIE DRUG?**

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### **Introduction**

In recent years we are seeing an increasing use of psychotropic drugs for criminal purposes. "*Burundanga*" is the name applied in Colombia for any hypnotic substance used with the intention of controlling a victim. Scopolamine and other drugs induce in victims a state of passivity, loss of will and complacency, which is exploited for criminal acts.

### **Objectives**

We want to describe the clinical features of scopolamine intoxication.

### **Methods**

We introduce a case report of scopolamine criminal intoxication and make a review of the literature.

### **Results**

A woman of 70 years old came to Emergency Department because of an anxiety episode after the discovering of a steal suffered under the effects of an scopolamine intoxication. Scopolamine blocks the cholinergic system in limbic and associated cortex, inducing in the victim an attitude of automation and memory impairment. In some people it causes an agitated delirium and very high doses can induce convulsions, coma and even death.

### **Conclusions**

Scopolamine's criminal use should be always carefully evaluated because of the potential neurological and psychiatric impact.

## QUALITY OF LIFE IN ALZHEIMER'S DISEASE: THE FACTORS ASSOCIATED WITH DEMENTIA SEVERITY

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**Objectives:** The factors related to Quality of life (QoL) ratings in dementia are unclear. This study investigates the factors associated with self-reported and caregivers' ratings of PwD QoL, according to dementia severity.

**Methods:** Using a cross-sectional design, 203 people with mild and moderate Alzheimer's disease (AD), and their caregivers were interviewed. The dyads completed the Assessment Scale of Psychosocial Impact of the Diagnosis of Dementia (ASPIDD), the Quality of Life in Alzheimer's disease Scale (QoL-AD), the Mini-Mental State Examination (MMSE), the Clinical Dementia Rating (CDR) scale, the Cornell Scale for Depression in Dementia (CSDD), the Pfeffer Functional Activities Questionnaire (PFAQ), the Neuropsychiatric Inventory (NPI), and the Zarit Burden Interview (ZBI). Univariate and linear regression analyses were conducted to examine the contribution of the various factors in mild and moderate stage.

**Results:** We observed a significant difference ( $F=5.04$ ,  $p<0.05$ ) between self-reported QoL-AD scores and caregivers' ratings in mild and moderate stage. In mild stage, the linear regression indicated that the predictors were awareness of disease ( $p<0.01$ ), burden ( $p<0.05$ ) and PwD gender ( $p<0.01$ ). This final model of the factors explained 20% of the observed variance. In moderate stage, the predictors were awareness of disease ( $p<0.001$ ), burden ( $p<0.001$ ) and PwD formal education ( $p<0.05$ ). This final model of the factors explained 52% of the observed variance.

**Conclusions:** Our findings suggested that impaired awareness of disease and burden are clinical predictors to self-reported QoL and caregivers' ratings of PwD QoL in both mild and moderate stage. Also, PwD female gender and higher levels of PwD formal education are sociodemographic predictors in mild and moderate stage, respectively. However, clinical factors interfere more intensely in moderate stage QoL.

## ASSOCIATION BETWEEN DEPENDENT PERSONALITY DISORDER AND COGNITIVE DISORDERS IN CENTRAL AFRICA: A RESULT FROM THE EPIDEMCA PROGRAM

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**Objectives:** to investigate the association between the dependent personality disorder (DPD) and cognitive disorders in elderly in Central Africa.

**Methods:** a cross-sectional multicentre population-based study was carried out in Central African Republic (CAR) and Republic of Congo between 2011 and 2012 including both urban and rural sites in each country. Participants aged  $\geq 65$  years old were interviewed using the Community Screening Interview for Dementia (CSI-D). Elderly with low performance to the CSI-D (COGSCORE $\leq 24.5$ ) were then clinically assessed by neurologists and underwent further psychometrical tests. DSM-IV and Petersen criteria were required for dementia and MCI diagnoses, respectively. DPD was assessed using the Personality Diagnostic Questionnaire – 4+. Multinomial logistic regression models were used to estimate the associations.

**Results:** Out of 2001 participants screened, 1756 had data for cognitive status and DPD. In CAR, 61 and 67 had MCI and dementia, respectively and 56 and 57 in Congo, respectively. In CAR, the prevalences of DPD were 17.0% in cognitively normal, 29.5% in MCI and 11.9% in demented participants ( $p=0.022$ ). In Congo, the prevalences were 8.7%, 23.2%, 42.1% respectively ( $p<0.001$ ). Adjusted for sociodemographic, vascular covariables and depression, DPD was significantly associated with MCI (OR<sub>MCI vs Normal</sub>: 2.2 CI95%: 1.0-4.8;  $p=0.038$ ) and dementia (OR<sub>Dementia vs Normal</sub>: 4.4 CI95%: 2.0-9.6,  $p<0.001$ ) in Congo but not in CAR (OR<sub>MCI vs Normal</sub>: 1.9 CI95%: 1.0-3.6;  $p=0.057$ ; OR<sub>Dementia vs Normal</sub>: 0.6 CI95%: 0.3-1.6,  $p=0.307$ ).

**Conclusions:** DPD was associated with MCI and dementia in Congo but not in CAR. This study paves the way for research on the association between personality and cognitive impairment in Africa, hitherto reserved for Western countries. Further studies with validated tools are needed to confirm this association and to better understand the biological mechanisms underlying this relationship if confirmed.

## COMPARISON OF DIFFERENT DELIRIUM DIAGNOSTIC CRITERIA AND VALIDATION OF THE SPANISH DELIRIUM RATING SCALE REVISED – 98 AGAINST THEM

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### Objectives

To compare diagnosis of delirium according to different criteria (DSM-5, DSM-IV, DSM-III-TR, and ICD-10) and validate the Spanish-DRS-R98 against them, in patients admitted to a facility with high prevalence of dementia.

### Methods

All patients admitted to a skilled nursing facility were evaluated during the first 24-48 hours after admission, using the DRS-R98 and the delirium diagnostic criteria systems. We compiled also demographic and clinical data, and searched for antecedents of dementia according to the Spanish-IQCODE.

### Results

125 patients were evaluated, 36 of whom (28.8%) were diagnosed with delirium by at least one diagnostic criteria system and only 19 (15.2%) by all four. Almost all cases met DSM-III-R criteria (34 patients) whereas ICD-10 had the fewest (19 cases). 85 patients (68.8%) had a possible previous dementia –a group that had higher likelihood of a delirium diagnoses. DRS-R98 showed excellent internal consistency (Cronbach's  $\alpha = 0.914$ ). Validity of the scale against all diagnostic criteria was very good (accuracy >90% for all ROC analysis), without significant differences on accuracy of the tool between them ( $p = \text{NS}$  for all Hanley & McNeil  $\chi^2$ ). However, when we compared patients with/without dementia there was greater accuracy for the DRS-R98 in non-demented when using any of the four diagnostic criteria ( $p < 0.05$  for all Hanley & McNeil  $\chi^2$ ). Best delirium cut-off score (ROC analysis) for the DRS-R98 in the whole sample was 14.5 for any DSM and 15.5 for ICD-10.

### Conclusions

Inclusiveness of DSM-III-R could be a result of the greater presence of delirium core domains. Despite differences across diagnostic criteria, DRS-R98 is very good at discriminating delirium cases in a population with high prevalence of dementia, and its best cut-off score is very similar across criteria. All four classification systems had a better performance in patients without dementia.

## ATTENTION AND NEUROPSYCHOLOGICAL TEST PERFORMANCE IN COGNITIVELY IMPAIRED ELDERLY

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**Objectives:** Attention plays a fundamental role in cognitive performance and is closely interrelated with all major cognitive domains. We sought to correlate different measures of attention with deficits in standard cognitive parameters in cognitively impaired elderly memory clinic outpatients.

**Methods:** Outcomes of neuropsychological testing of 94 consecutive individuals presenting with cognitive complaints in a large urban memory clinic were retrospectively analyzed. The Consortium to Establish a Registry for Alzheimer's Disease-Neuropsychological Battery (CERAD-NB; including verbal fluency, memory, TMT-A and -B, Boston Naming Test) was routinely used. Z-scores of all relevant cognitive parameters were correlated with the attentional subtests tonic and phasic alertness, inhibition and divided attention assessed with a standardized computer-based program.

**Results:** The pooled sample consisted of 36 patients with the diagnosis of mild Alzheimer's Disease (mAD), 30 patients with Mild Cognitive Impairment (MCI), 19 patients with Major Depressive Disorder (MDD), and 9 healthy individuals with subjective cognitive complaints. In a whole, attention performances of patients with AD or MCI were unaffected in all subtests. Both healthy memory complainers and MDD patients presented normal values for divided attention and inhibition, respectively, but decreased alertness. Patients with AD showed the lowest performances in the CERAD-profile and delayed verbal recall in particular. Executive functions (TMT-A/-B) were significantly correlated with alertness ( $0.27 \leq r \leq 0.41$ ,  $p < 0.05$ ) and divided attention ( $0.34 \leq r \leq 0.41$ ,  $p < 0.05$ ), but not with inhibition. The number of laps in the divided attention task significantly correlated with deficits in all CERAD subtests except discriminability and phonematic fluency.

**Conclusions:** Basic Attention - as important factor for everyday competence - was not impaired in patients with mAD and MCI, whereas depressive patients and memory complainers showed decreased alertness but normal inhibition and divided attention, respectively. Performance in divided attention (reaction time and especially lapses) may be a sensitive indicator for incipient cognitive deficiency.

## DEMENTIA WITH LEWY BODIES

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**Objectives:** To make a theoretical review about the Dementia with Lewy bodies (DLB)

**Methods:** Literature research in major databases: PubMed, Cochrane, Uptodate, using the keywords: Dementia with Lewy bodies.

**Results:** 73 year old woman was admitted to the psychiatric ward for behavioral disturbances. She was referred by Neurology Service. Past history: Major chronic ischemic right parietal stroke, hypertension, diabetes mellitus, dyslipidemia. Three weeks before admission she felt down with head trauma without loss of consciousness, she has no wandering, not eating, not sleeping for days. Talk to people who think see and hear, and she was heteroaggressive. A head Computer Tomography was performed showing: no bleeding, bilateral frontal subcortical atrophy. During admission urinary infection and hypoglycemia were diagnosed. She was sleepy and disoriented in time and space. After antibiotic was established and the glycemia was normal, sleep pattern returns to normal, the patient denied sensoroperceptive changes, she presented significant alteration of global memory, disorientation persists. She presented clumsy way, cogwheel rigidity and tremor even before instituting neuroleptics. She had extrapyramidal side effects with very low dose of risperidone. She was discharged with the diagnosis of “Behavioral impairment in patient with dementia (vascular versus Lewy)”

### Conclusions:

Most experts estimate that DLB is the third most common cause of dementia after Alzheimer's disease and vascular dementia.

Lewy bodies are also found in other brain disorders, including Alzheimer's disease and Parkinson's disease dementia.

Many people with Parkinson's disease develop problems with thinking and reasoning, and many people with DLB experience movement symptoms. This overlap in symptoms and other evidence suggest that DLB, Parkinson's disease and Parkinson's disease dementia may be linked to the same underlying abnormalities in how the brain processes the protein alpha-synuclein.

Neuroleptic drugs should be used with caution in DLB. They may cause serious side effects in patients with DLB.

## SCREENING FOR COGNITIVE IMPAIRMENT – AN ALGORITHM FOR PRIMARY HEALTH CARE IN LOW RESOURCE SETTINGS

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With the projected increase in the elderly population and expected rise in the prevalence of dementia, particularly in low-and-middle-income countries, early case-identification is necessary for planning and delivering clinical services.

**Objectives:** The aims of this research study were to assess the performance of selected screening tools and a neuropsychological battery of tests in a residential population in Durban, South Africa and to propose an algorithm for use in primary health care settings.

**Methods:** A cross-sectional study was conducted in a heterogeneous elderly South African population and consisted of three stages of data collection: 1) Cognitive screening measures were administered to a group of 302 participants, aged +60 years, living in a residential facility for the aged; 2) A sub-sample of 140 participants were assessed for cognitive impairment based on the DSM-IV-TR and Criteria A and B for Alzheimer's and Vascular dementia were applied to assign a diagnosis of dementia. Mild Cognitive Impairment (MCI) was identified using the criteria of the International Working Group on Mild Cognitive Impairment; 3) Of the 140 participants, 117 were administered a neuropsychological battery of tests. The influence of demographic variables and the sensitivity, specificity and optimum cut-off scores were determined for 11 screening measures, individually and in combination.

**Results:** Eleven (7.9%) cases of dementia and 38 (27.1%) MCI cases were diagnosed. Of the 11 neuropsychological tests evaluated, sensitivities for dementia ranged from 44.4% to 100% with the Clinical Subjective Memory Complaints (CSMC) correctly identifying 90% of people with dementia.

**Conclusion:** CSMC's are valid screening questions as a first level of 'rule-out' screening. The MMSE can be included at a second stage of screening at general hospital level and neuropsychological tests in specialist clinical settings



## **AWARENESS OF DISEASE IN DEMENTIA: THE ASSESSMENT SCALE OF PSYCHOSOCIAL IMPACT OF THE DIAGNOSIS OF DEMENTIA**

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**Objective:** Despite the growing understanding of the conceptual complexity of awareness, there currently exists no instrument for assessing different domains of awareness in dementia. In the current study, we aim at explore the psychometric properties of a multidimensional awareness scale, the Assessment Scale of Psychosocial Impact of the Diagnosis of Dementia.

**Methods:** Using a cross-sectional design, 201 people with dementia and their family caregivers were interviewed. The dyads completed the Assessment Scale of Psychosocial Impact of the Diagnosis of Dementia (ASPIDD), the Quality of Life in Alzheimer's disease Scale (QoL-AD), the Mini-Mental State Examination (MMSE), the Clinical Dementia Rating (CDR) scale, the Cornell Scale for Depression in Dementia (CSDD), the Pfeffer Functional Activities Questionnaire (PFAQ), the Neuropsychiatric Inventory (NPI), and the Zarit Burden Interview (ZBI).

**Results:** Cronbach's alpha was high ( $\alpha = .87$ ), indicating excellent internal consistency. The mean of corrected item-total correlation coefficients was moderate. ASPIDD presented a four-factor solution with a well-defined structure: awareness of activities of daily living, of cognitive functioning, of emotional state and of social functioning and relationships. Functional disability was positively correlated with total ASPIDD scores ( $r = .42$ ,  $p < 0.001$ ), unawareness of activities of daily living ( $r = .32$ ,  $p < 0.001$ ), of cognitive functioning ( $r = .41$ ,  $p < 0.001$ ) and of emotional state ( $r = .21$ ,  $p = 0.04$ ). Similarly, caregiver burden was correlated with total ASPIDD scores ( $r = .30$ ,  $p < 0.001$ ) and unawareness of cognitive functioning ( $r = .31$ ,  $p < 0.001$ ).

**Conclusions:** The results suggest that ASPIDD is indeed a multidimensional scale, providing a reliable measure of awareness of disease in dementia. Further studies should explore the risk factors associated with different dimensions of awareness in dementia.

## **THE CHANGE OF ENDOTOXIN, ACHE, CHAT AND TAU PROTEIN IN PATIENTS WITH ALZHEIMER'S DISEASE**

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**Objective:** To investigate the change of endotoxin, AchE, ChAT and Tau protein in patients with Alzheimer's disease (AD).

**Methods:** From January 2012 to January 2013, subjects of patients with AD and healthy elderly were collected from hospital and nursing homes from Taiyuan City, China. Subsequently, cognitive function of the two group subjects were assessed by MMSE and ADAS-Cog. The level of endotoxin was determined by TAL, AchE, ChAT and Tau protein were determined by ELISA.

**Results:** MMSE score in the patients with AD were significantly lower than the healthy elderly ( $P < 0.001$ ), ADAS-Cog score in patients with AD were significantly higher than the healthy elderly ( $P < 0.001$ ); patients with AD endotoxin, AchE, ChAT and Tau protein were significantly higher than the healthy elderly ( $P < 0.05$ ).

**Conclusions:** Patients with AD were all accompanied intestinal endotoxemia and that may be a risk factors in the development of AD.

**Key words:** Alzheimer's disease; Intestinal endotoxemia; endotoxin; AchE; ChAT; Tau protein

## **COCKROACH IN THE SOUP AND MANOLO ESCOBAR'S SONGS. HALLUCINATORY SYNDROMES IN SENSORY PRIVATION CONDITIONS. TWO CASE REPORTS**

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### **Objectives**

Certain hallucinatory syndromes (visual and auditory), with an unknown etiology, could be related to sensory deprivation. Charles Bonnet syndrome is a condition characterised by complex visual hallucinations associated to visual loss, it is not related to psychotic mental illness. Musical hallucinosis is also a condition where patients, mostly old aged women where auditory hallucinations is associated to hypacusia.

### **Methods and Results**

We showed two cases reports with both conditions

A is a 85 years old woman suffering from macular degeneration with an almost complete visual loss. She started developing an hallucinatory picture consisting in seeing small insects, refusing eating it. She saw human faces and also figures in movement. CTScan showed a vascular encephalopathy and there was a slight cognitive deterioration. She responded well to low dose of haloperidol, most of the hallucinations disappeared, persisting some isolated ones.

B is a 72 years old woman suffering from musical auditory hallucinations. Musical hallucinations (popular songs) were there all the time, but there were particularly distressing when she was on her own, and at night. She described Manolo Escobar's songs when she was trying to pray at night. She suffered from otosclerosis and subsequently hypacusia and cortico-subcortical atrophy was remarkable in CTScan and she quickly developed a cognitive deterioration in spite of initial correction of hallucinatory symptoms.

### **Conclusions.**

These two conditions appears in patients without a previous story of mental illness. Their etiology is unknown. No visual or auditory primary cortex is affected. In both cases there were a sensory privation, and they were frequently associated to neurological damage, usually cognitive deterioration. They seems to be hallucinatory syndromes that appears in such conditions as if the brain produces sensory signal when it does receive stimuli. They are also examples of hallucinatory experiences in normal people in sensory privation conditions. Some of the hallucinations are more related to childhood or youth memories, than sensory cortex activation.

## **DELIRIUM IN GENERAL HOSPITAL: PREVALENCE AND MORTALITY**

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**Introduction.** Delirium is a common disorder in inpatients associated with higher morbidity and mortality. The aim of the present work was detect patients with delirium admitted in medical and surgical adult areas, in University Hospital (Hospital Pasteur), Montevideo, Uruguay.

**Methods.** We performed a cross-sectional study. Exclusion criteria were: patients with severe neurological diseases with communication impairments, severe psychiatric disorders. The diagnosis of confusion was performed using the Confusion Assessment Method for the Intensive Care Unit (CAM-ICU), a validated test used in ICU and hospitalized patients. The study was approved by the local ethics committee and informed consent was obtained from all participants. The relative risk and association analyses were performed using chi-squared test and Fisher's exact test. All statistical tests were two-sided and assessed at  $p = 0.05$  significance level.

**Results.** Were evaluated 160 patients, mean age  $62 \pm 16$  years, where 12 patients had delirium (7.5%). It was more frequent in patients older than 65 years (OR 6.0) and mixed subtype was more prevalent. In 7/12 cases (58%) the delirium had not been diagnosed by the medical team a charge. A 100-day study, showed 5.4% mortality (8 patients), where half had had delirium and did not have the diagnosis at the moment of the study. The 33.3% of confused patients had died at 100 days, with 16 times higher risk of death ( $p 0.001$ ).

**Conclusion.** The objective assessment of delirium contributed to its early detection and in our serie was possible detect patients still undiagnosed. The routinary use of CAM-ICU in patients with risk factors for develop delirium, could contribute to the early diagnosis and with a early correction of the reversible factors.

## COMPARISON BETWEEN SERUM IL-10 AND IL-1B LEVELS ON INTESTINAL ENDOTOXEMIA IN CHINESE SAMPLE OF ALZHEIMER'S DISEASE PATIENTS AND HEALTHY CONTROLS

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**Objective:** To observe the AD patients whether accompanied IETM, and further explore the pathogenesis in the course of AD. Effect of Intestinal endotoxemia (IETM) on patients with Alzheimer's disease (AD) and healthy controls.

**Methods:** From January 2012 to January 2013, patients with AD, healthy elderly and healthy young subjects were collected from hospital, community and nursing homes from Taiyuan City, China. Subsequently, cognitive function of the three groups of subjects were assessed by MMSE and ADAS-Cog, the level of endotoxin (ET) was determined by Chromogenic End-point Tachypleus Amebocyte Lysate (CE TAL), tumor necrosis factor-alpha (TNF- $\alpha$ ), serum IL-10 and IL-1 $\beta$  were determined by ELISA.

**Results:** The AD group had MMSE score was significantly lower than the healthy elderly group and young group ( $P < 0.001$ ), healthy elderly group and youth group were no difference ( $P = 0.960$ ); the AD group ADAS-Cog scores significantly higher than the healthy elderly group and youth group ( $P < 0.001$ ), healthy elderly group and youth group were no difference ( $P = 0.500$ ). AD group LPS, TNF- $\alpha$ , serum IL-10 were significantly higher than the healthy elderly group and young group ( $P = 0.041 < 0.05$ ), but AD group serum IL-1 $\beta$  between the healthy elderly group and young group were no difference ( $P = 0.292 > 0.05$ ), the healthy elderly group and young group were no difference ( $P = 0.655, 0.555$ ).

**Conclusions:** It confirmed AD patients existed intestinal endotoxemia (IETM), and compared with age of non-AD patients the difference was significant. It prompted endotoxin may cause inflammation, LPS, TNF- $\alpha$  and serum IL-10 played an important role in AD pathogenesis.

**[Key words]:** Alzheimer's disease; Intestinal endotoxemia; endotoxin (ET); tumor necrosis factor- $\alpha$ ; IL-10 ; IL-1 $\beta$

## **EFFECTS OF SERUM NO LEVELS ON INTESTINAL ENDOTOXEMIA IN CHINESE SAMPLE OF ALZHEIMER'S DISEASE PATIENTS AND HEALTHY CONTROLS**

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**Objective:** To observe the AD patients whether accompanied IETM, and further explore the pathogenesis in the course of AD. This will provide new thinking and theoretical basis for elucidating the pathogenesis of AD.

**Methods:** From January 2011 to January 2012, patients with AD, healthy elderly and healthy young subjects were collected from hospital, community and nursing homes from Taiyuan City, China. Subsequently, cognitive function of the three groups of subjects were assessed by MMSE and ADAS-Cog, the level of endotoxin (ET) was determined by Chromogenic End-point Tachypleus Amebocyte Lysate (CE TAL), tumor necrosis factor-alpha (TNF- $\alpha$ ), serum NO were determined by ELISA.

**Results:** The AD group had MMSE score was significantly lower than the healthy elderly group and young group ( $P < 0.001$ ), healthy elderly group and youth group were no difference ( $P = 0.960$ ); the AD group ADAS-Cog scores significantly higher than the healthy elderly group and youth group ( $P < 0.001$ ), healthy elderly group and youth group were no difference ( $P = 0.500$ ). AD group LPS, TNF- $\alpha$ , serum NO were significantly higher than the healthy elderly group and young group ( $P < 0.001$ ), the healthy elderly group and young group were no difference ( $P = 0.655, 0.555$ ).

**Conclusions:** It confirmed AD patients existed intestinal endotoxemia (IETM), and compared with age of non-AD patients the difference was significant. It prompted endotoxin may cause inflammation, NO also played an important role in AD pathogenesis.

**[Key words]:** Alzheimer's disease; Intestinal endotoxemia; endotoxin (ET); tumor necrosis factor- $\alpha$ ; NO

## EFFECTS OF INTESTINAL ENDOTOXEMIA IN PATIENTS WITH ALZHEIMER'S DISEASE

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**Objective:** To investigate the effect of Intestinal endotoxemia (IETM) on patients with Alzheimer's disease (AD).

**Methods:** From January 2011 to January 2012, patients with AD, healthy elderly and healthy young subjects were collected from hospital, community and nursing homes. Subsequently, cognitive function of the three groups of subjects were assessed by MMSE and ADAS-Cog, the level of endotoxin (ET) was determined by TAL, tumor necrosis factor- alpha(TNF- $\alpha$ ) were determined by ELISA.

**Results:** The AD group had MMSE score was significantly lower than the healthy elderly group and young group ( $P < 0.001$ ), healthy elderly group and youth group were no difference ( $P = 0.960$ ); the AD group ADAS-Cog scores significantly higher than the healthy elderly group and youth group ( $P < 0.001$ ), healthy elderly group and youth group were no difference ( $P = 0.500$ ). AD group LPS and TNF-alpha were significantly higher than the healthy elderly group and young group ( $P < 0.05$ ), the healthy elderly group and young group were no difference ( $P = 0.655, 0.555$ ).

**Conclusions:** AD patients were accompanied intestinal endotoxemia and that may be a risk factors in the development of AD.

**[Key words]:** Alzheimer's disease; Intestinal endotoxemia; endotoxin(ET); tumor necrosis factor- $\alpha$

## **CORRELATES OF CAREGIVER BURDEN IN CAREGIVERS OF INDIVIDUALS WITH AMNESTIC MILD COGNITIVE IMPAIRMENT (AMCI)**

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**Introduction:** Mild cognitive impairment (MCI), especially of the amnesic type, is often considered the earliest clinical sign of probable AD. Caregiver burden (CB) is a critical indicator of the negative impact of caregiving. There is a wealth of research on the caregiver burden and Alzheimer's dementia but research on MCI especially amnesic type and caregiver burden is deficient. Considerably less is known about the specific correlates and potential causes of caregiver burden on carers of patients with amnesic mild cognitive impairment (aMCI).

**Objectives:** To confirm the presence of caregiver burden in aMCI  
To determine the specific correlates and potential causes of caregiver burden in aMCI.

**Methods:** Retrospective study done in a tertiary specialist neurocognitive clinic in the UK. 92 patients diagnosed with aMCI according to the Petersen criteria were included. Nonparametric Spearman correlation analyses examined relationships between CB scores and measures including apathy, executive functioning, behavioural pathology, cognitive scores, depression, anxiety & ADL's. Forward stepwise linear multiple regressions identified significant predictors of CB.

**Results:** Repetitive questioning was most commonly endorsed and distressing component of CB questionnaire. CB was significantly associated with greater apathy and behavioral pathology, and deficits in IADL but did not correlate significantly with executive function, depression, anxiety or cognitive scores. Apathy was the only significant predictor of CB in the outputted model on multiple regression analysis.

**Conclusions:** aMCI caregivers are at an increased risk for caregiver stress and apathy is significant predictor of CB in our analysis.  
Carers of aMCI patients with apathy are at a high risk of increased CB and they ought to be prioritised for enhanced assistance and/or education in caring for their loved ones.



## **COGNITIVE IMPAIRMENT AND BEHAVIORAL DISORDERS. NEUROSYPHILIS- A CASE REPORT.**

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### **Summary:**

Syphilis is a chronic infectious disease caused by *Treponema pallidum*. The discovery of penicillin decreased the number of cases and the later forms. Progressive General Paresis (PGP) is one of this later expression and one of the most common causes of dementia in the pre - antibiotic period.

### **Case report:**

A patient with a history of medical HBV (+) without personal psychiatric background, presented with anxious - depressive symptoms, dementia, characterological changes and behavioral disturbances during the months previous to admission. Psychomotor agitation, visual hallucinations and disorientation were presented on admission.

Differential diagnosis of diseases which cause dementia with behavioral disturbances is performed (degenerative, toxic, metabolic and infectious diseases, hydrocephalus, ischemic or hemorrhagic damage of the central nervous system and tumors). Positive serology for syphilis was obtained.

He was treated with intravenous penicillin for 14 days, achieving progressive resolution of the presentation, with persistence of some cognitive impairment.

### **Discussion:**

The beginning of the PGP is insidious, with personality changes, irritability, memory loss and attention deficit, followed by dementia with disorientation, disturbance of the reality judgment, exaltation of tendon reflexes and Argyll -Robertson pupil. The evolution of the symptoms can lead to death.

In patients with behavioral disturbances and cognitive impairment neurosyphilis should be included in the differential diagnosis, as it is a potential reversible disease, which can lead to irreversible cognitive impairment if the treatment is delayed.

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## **DEMENTIA DIAGNOSIS AND POST-DIAGNOSTIC SUPPORT DEVELOPMENT IN A SCOTTISH HEALTH REGION (FIFE)**

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**Objectives:** To increase the identification, diagnosis and registration of people on a Primary Care Dementia Register, and to design and implement a dementia post-diagnostic support service (PDS) in one Scottish Health region (Fife).

**Methods:** The Scottish Government<sup>1</sup> introduced targets for identifying and registering at Primary Care (general practitioner) level people with dementia, and in 2013 made the pledge to guarantee each person newly diagnosed with dementia at least one year of post-diagnosis support based on the “5-Pillar” model of support championed by Alzheimer Scotland<sup>2</sup>. Fife, a Scottish region with a population of 360K, was noted to have underperformed in dementia registrations compared to the remainder of Scotland (population ~5.3 million). The Scottish Government offered a ‘performance support team’ to work within Fife to assist clinicians and managers in identifying barriers to dementia registration and to suggest areas for performance improvement. As a consequence a multiagency Fife Dementia Executive group was established (May 2013) to deliver on these identified areas for improvement and to develop a local model for delivering on the commitment for post-diagnostic support.

**Results:** A unified dementia diagnostic pathway was adopted, with an emphasis on supporting dementia diagnosis in Primary Care. The dementia register increased from 42% (April 2013) to 51% (February 2014) of expected prevalence, approaching the Scottish Government’s target of 53%. A model for providing the PDS was agreed (Feb 2014) with planned incremental implementation, although resource identification remained an issue.

**Conclusions:** A structured approach to dementia diagnosis assists dementia registrations. A PDS identifies and links support providers and helps identify resource requirements.

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2. <http://www.alzscot.org/>

## **DIFFICULTIES IN THE DIAGNOSIS OF DEMENTIA:A CASE STUDY**

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**Introduction:** Dementia is a syndrome of global and progressive deterioration of acquired cognitive abilities, caused by organic disease of the central nervous system, with preserved consciousness, where particularly damaged issues are the ability of memory, learning, abstract thinking, orientation, attention, emotion and executive function. Depression is often one of the first signs of dementia.

**Case study** describes a female patient, aged 62, who is on a psychiatric treatment for three years. The first difficulty was disturbance, moodiness, insomnia and began after surgery polyposis of the stomach. Diagnosed as a reactive depression, she started to use antidepressant, and an improvement was noticed. Later in the clinical picture beside the depressed mood the delusions of relations appeared. She was set in the hospital, treated as a severe psychotic depression and antipsychotics therapy was introduced. On the day of admission to the Department of psychiatry when she was reviewed for the first time by the ordinaries status the dominated signs were of parkinsonism, agitation, the orofacial dyskinesia was present, she was confused. During the hospitalization hyperapetitia and visual hallucinations were recorded. After the exclusion of antipsychotic treatment and the introduction of antiparkinsonic drugs, cholinesterase inhibitors, antidepressants - the improvement appears, except that the confusion and mood fluctuations persist.

**Conclusion:** Having applied tests, clinical exploration and neurologist consultation our opinion is that this case was dementia with Lewy small bodies. This case shows how important is early diagnosis of dementia in order to stop disease progression and improve the quality of life.

Keywords: depression, dementia, parkinsonism

## **DIFICULTADES EN EL DIAGNÓSTICO DE PATOLOGÍA ORGÁNICA EN PACIENTES PSIQUIÁTRICOS**

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### **INTRODUCCIÓN**

Se presenta el caso clínico de una paciente de 67 años con esquizofrenia residual de inicio en la adolescencia. El motivo de consulta fue la negativa a caminar, por lo que acude hasta en cinco ocasiones al servicio de urgencias hospitalario. Tras desestimar en todas ellas su ingreso por patología orgánica urgente, la paciente acabó finalmente ingresando en la Unidad de Hospitalización Breve de Psiquiatría debido a su imposibilidad de manejo. Durante su ingreso se detectó fractura con hundimiento del platillo tibial derecho y luxación de menisco interno, infección del tracto urinario, así como alteraciones hidroelectrolíticas y abuso de medicación. Se diagnosticó de síndrome confusional agudo.

### **CONCLUSIÓN:**

En los pacientes diagnosticados de patología psiquiátrica crónica se tiende a menudo a subestimar la presencia de una posible patología orgánica al consultar en los servicios de urgencias.

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- 2.- Correas J, Quintero FJ, Vega M. Breviario de Urgencias Psiquiátricas. Barcelona: Elsevier Masson; 2011.

## THE EFFECTS OF ALBUMIN AND WHITE MATTER HYPERINTENSITY ON COGNITIVE FUNCTION IN THE ELDERLY

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**Objectives:** Low albumin level and subcortical ischemic changes might be associated with cognitive performance in the elderly. We examined the relationship between albumin level, white matter hyperintensity(WMH) and cognitive function among 1038 old adults

**Methods:** Blood samples were drawn from all consenting subjects, and an albumin level was treated as a categorical variable based on quartile. Cognitive function was assessed by the Korean version of Mini Mental State Examination (K-MMSE). We also evaluated the severity of WMH as mild and severe level on brain MRI images.

**Results:** After a multivariable adjustment, we could find significant differences in K-MMSE score among albumin level groups ( $F=6.5$ ,  $p<0.001$ ) but not between WMH mild and severe groups( $t=0.2$ ,  $p=0.827$ ), independently. Interestingly, the interaction between albumin level and the severity of WMH was shown to be significantly associated with cognitive function(analysis of covariance,  $F=3.8$ ,  $p=0.010$ ). In post hoc tests, a higher K-MMSE score was rather observed in subjects with higher albumin level and severe WMH.

**Conclusions:** Higher albumin level with severe subcortical ischemic changes appears to be related to cognitive function in old adults.

## **EXPLORE AN OPTIMAL CUTOFF SCORE ON THE MONTREAL COGNITIVE ASSESSMENT IN THE PRIMARY SCREENING AMONG MILD COGNITIVE IMPAIRMENT AND MILD DEMENTIA**

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**Objective:** There is a high risk that mild cognitive impairment would develop into Alzheimer's disease. Montreal Cognitive Assessment (MoCA), which has been translated into different languages and used in many countries, was developed for rapid screening of cases with mild cognitive impairment. However the cut off may be too high at the suggested score of 26. Thus the aims of the study were to determine the cutoff scores on the MoCA to differentiate older people with normal cognitive function, mild cognitive impairment and mild dementia, as well as the utilization of MoCA used in primary screening.

**Methods:** A cross-sectional study design with self-administered questionnaires was applied in this study. Participants aged 60 years or older were recruited from community and long-term care facility. The MoCA and MMSE were adopted and then analyzed the result among different types of cognitive states.

**Results:** Descriptive statistics were used to describe the demographic data. Chi Square Test and one-way analysis of variance were used to compare demographic and neuropsychological data. The receiver operator characteristic (ROC) curve analyses was used to determine optimal specificity and sensitivity through the MoCA and MMSE score to differentiate mild cognitive impairment and mild dementia, and to find the appropriate cut off score. The results of the study would be compared with previous studies.

**Conclusions:** Montreal Cognitive Assessment is a brief and quick screening tool for detecting of mild cognitive impairment. It would contribute to establish a follow-up care plan for this population in the future, and reduce the possibility to develop into dementia.

## CEREBRAL AMYLOID ANGIOPATHY AND DEMENTIA – A CASE REPORT

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**Objectives:** Cerebral amyloid angiopathy (CAA) is a degenerative angiopathy due to amyloid deposits in the walls of arteries, arterioles and, less often, capillaries and veins of the central nervous system. CAA is an important cause of cerebral hemorrhage and may also result in ischemic lesions and dementia. The most common sporadic CAA, caused by a beta deposition, is associated with aging and is a common feature of Alzheimer disease (AD).

This work describes the clinical case of a 72 year old woman with no significant psychiatric history that within one month developed behavioral changes, reduced verbal and motor initiative, speech and gait impairment, sphincter incontinence and akinetic–rigid syndrome. The MRI showed a hematoma in the left frontal region and multiple small cortical and sub-cortical hemorrhages.

**Methods:** Revision of scientific literature through *Pubmed*, using search terms including cerebral amyloid angiopathy and cerebral hemorrhage. The research was complemented with information from *Uptodate*.

**Results:** Description of the clinical case.

**Conclusion:** Cerebral amyloid angiopathy is an important cause of cerebrovascular disorders including lobar cerebral hemorrhage, leukoencephalopathy, and small cortical hemorrhage and infarction. Clinicians should be aware that CAA is not only related to stroke but also to neurodegeneration and dementia of Alzheimer's type.

## THE PREVALENCE OF DELIRIUM IN ELDERLY HOSPITALIZED PATIENTS IN MEDICAL WARDS IN KING ABDULAZIZ UNIVERSITY HOSPITAL; JEDDAH

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**Objective:** Delirium is a common condition that affects elderly patients. In this study we measured the prevalence of delirium in patients admitted to our institute in medical wards. We also studied the possible risk factors, as well as the effect of delirium on mortality and the length of stay.

**Methods:** We tested the elderly patients admitted to the medical wards at King AbdulAziz University Hospital in Jeddah for the presence or absence of delirium. Testing took place between March 27<sup>th</sup> 2012 and March 31<sup>st</sup> 2012. The diagnosis of delirium was based on Confusion Assessment Method (CAM).

**Results:** A total of 144 patients were admitted in the medical wards at the time of the study, of which 52 were eligible for the Study. Thirteen cases of delirium were detected, with a prevalence of 36.1%. Factors associated with the development of delirium were hypertension and bronchial asthma ( $p=0.040$  and  $0.038$  respectively). The regression adjustment model showed that Coronary Artery Diseases ( $p=0.018$ ) and Chronic Kidney Diseases ( $p=0.009$ ) were also significant predictors. The diagnosis of delirium was strongly related to a longer hospital stay ( $p=0.011$ ). Deaths were more frequent among patients with delirium but the association between delirium and mortality did not reach statistical significance ( $p=0.242$ ).

**Conclusions:** Delirium is highly prevalent in this sample of elderly medical inpatients in Saudi Arabia, with a significant impact on hospital length of stay and a possible increase in mortality. Further studies and are needed to highlight more details on this condition in our hospitals and to guide strong preventive and educational efforts.



## **FRAIL ELDERLY PATHWAY PROJECT**

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### **Background**

Public consultations inform us that people want to stay in their own homes for as long as possible, that prolonged hospital stays are detrimental for frail elderly patients, and some admissions could be avoided if services and supports were available closer to people, in their own communities.

### **Objectives**

“A comprehensive, collaborative, integrated, multi-disciplinary team assessment in the Accident and Emergency (A&E) department results in improved care for elderly patients with the following outcomes”

- 1) Avoiding inappropriate hospital admissions
- 2) Early identification and management of delirium/cognitive impairment.
- 3) Increase in Adults with Incapacity (AWI) assessments
- 4) Reducing A&E waiting times, mortality, institutionalization, psychotropic prescriptions and readmission rates
- 5) Improved patient and carer satisfaction.

### **Methods**

A multidisciplinary team (MDT) based in the A&E of Crosshouse Hospital, Kilmarnock, included an Elderly Mental Health (EMH) liaison psychiatry nurse, EMH Consultant Liaison input, Consultant geriatrician, Pharmacist, Intermediate Care and Enablement Service (IC&ES) team with referral on to appropriate services depending on person's needs.

All patients over 65 years attending A&E are included with exceptions of patients with acute needs. After initial A&E triage, a comprehensive MDT assessment was followed by 4AT screening and medication reconciliation. Over 3000 patients have been involved in this study to date.

### **Results**

Interim results show admissions have reduced by 15%.

Waiting time for all age groups in A&E has reduced by 10%.

Documented diagnosis of delirium has increased with 4AT screening.

Patients, carers and staff report improved satisfaction with the service provided.

More detailed results and analysis shall be available in the next 2 months.

### **Conclusions**

Multidisciplinary integrated service for frail elderly people in A&E improves the patient journey and experience.

Delirium/cognitive impairment is identified and treated earlier.

Hospital admissions are significantly reduced with associated cost reduction.

## **THE PLACE OF ELECTROCONVULSIVE THERAPY FOR MELANCHOLIC PATIENTS WITH DEMENTIA**

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### **Objective and method**

The work aims to study the therapeutic efficiency of electroconvulsive therapy (ECT) through three cases of patients suffering from melancholic depression associated to dementia treated by this therapy.

### **Results**

Our respectively 72, 66 and 63-year-old patients were followed for bipolar disorder or for a recurring major depressive disorder associated to dementia. They presented a severe relapse of their mood disorder resistant to the medical treatment, which indicates electroconvulsive therapy. The number of session varied from 9 to 16 sessions for every patient. Remission of the depressive symptoms was obtained also stabilization or amelioration of the MMSE score.

### **Conclusion**

The frequency of the drug resistant forms of mood disorder especially the depressive one gives a dominating place for the electroconvulsive therapy which represents no contraindication for the ages subjects or having cognitive disorders which she can stabilize even to improve.

## **COGNITIVE STIMULATION PROGRAMS FOR COMMUNITY-DWELLING ELDERLY IN KOREA**

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### **Objectives**

In this study a cognitive stimulation group training program of 24 sessions was provided for community dwelling elders and the effects on cognitive function, depression and quality of life were tested.

### **Methods**

The participants were 232 community-dwelling elders who have mild cognitive disorder and mild dementia(CDR=0.5 or 1.0, Sum of box <4). This program was applied two times a week for 12 weeks. A quasi-experimental study using a one-group pretest-post test design was used. Research tool was also applied in order to verify the effects of the program on the subjects' ability toward ADL, cognitive function, and depression and caregiver's burden and quality of life.

### **Results**

A significant effect was confirmed ( $p < .05$ ) from the program, which was comprised of Korea version of WHOQOL-Bref, QOL-AD, S-IADL and Geriatric Depression Scale. In contrast, there was no significant effect in MMSE, GDS.

### **Conclusions.**

It seems that this program based on cognitive stimulation has an effect on the improvement of the ability toward ADL and on the caregiver burden of mild cognitive impairment and mild dementia patients living in a community.

## **MUSIC THERAPY WITH MILD ALZHEIMER'S DISEASE IN DAY-CARE CENTER**

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### **Objectives**

Music therapy is a potential non-pharmacological treatment for behavioral and psychological symptoms of dementia. However, although some studies have found it to be helpful, studies demonstrating the effectiveness of this approach are lacking. The purpose of this study was to reflect about the effects of the music therapy with mild Alzheimer's disease.

### **Methods**

This case-control study was carried out by music therapists in 7 Day Care Center. The participants were 91 patients with mild Alzheimer's disease (CDR=1.0) assigned randomly to a music therapy group and a control group. 140 participant with dementia were randomized to a sequence of 12 session of music therapy. The session of music therapy has four music activity types—rhythm playing with Korean instrument, exercising with music, singing of old Korean pop and conversational session with the special songs and singer. The aim of this study was to examine the effect of music therapy on agitation and to explore its effect on psychotropic medication and caregiver burden.

### **Results**

The study showed a significant reduction in activity disturbances in the music therapy group during a 8-week period measured with Alzheimer's Disease Rating Scale (BEHAVE-AD). Agitation disruptiveness increased during standard care and decreased during music therapy. Short Zarit Burden Inventory(S-ZBI) and the prescription of psychotropic medication decreased significantly more often during music therapy than during stand care.

### **Conclusions.**

Music therapy is a safe and effective method for treating agitation in mild AD and also a reduction for caregiver burden in Day-Care center

## STUDY ON ENDOTOXIN, TNF-A AND AB1-42 IN PATIENTS WITH ALZHEIMER'S DISEASE

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**Objective:** To investigate the change of endotoxin, tumor necrosis factor-alpha (TNF- $\alpha$ ) and  $\beta$ -amyloid (A $\beta$ ) in patients with Alzheimer's disease (AD).

**Methods:** From January 2012 to January 2013, subjects of patients with AD and healthy elderly were collected from hospital and nursing homes. Subsequently, cognitive function of the two group subjects were assessed by MMSE and ADAS-Cog. The level of ET was determined by TAL, TNF- $\alpha$  and A $\beta$ 1-42 were determined by ELISA.

**Results:** MMSE score in the patients with AD were significantly lower than the healthy elderly (P <0.001), ADAS-Cog score in patients with AD were significantly higher than the healthy elderly (P <0.001); patients with AD's endotoxin, TNF- $\alpha$  and A $\beta$ 1-42 were significantly higher than the healthy elderly (P <0.05).

**Conclusions:** Patients with AD were all accompanied intestinal endotoxemia and that may be a risk factors in the development of AD.

**[Key words] :** Alzheimer's disease; Intestinal endotoxemia (IETM); endotoxin; tumor necrosis factor- $\alpha$ ;  $\beta$ -amyloid

## **FRONTAL VARIANT OF FRONTO-TEMPORAL DEMENTIA: A BEHAVIOURAL VARIANT**

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**OBJECTIVES:** To analyse from a clinical, diagnostic, evolutionary point of view the Frontal Variant of Fronto-Temporal Dementia (FvFTD) via the presentation of an illustrative, clinical case.

**METHODS:** This clinical case shows the progressive change in personality and behaviour, what is typical of FvFTD. A 58 years old lady presents behavioural disturbances, mood worsening and emotional lability, as a progressive three years deterioration. During the two last months, irritability and oppositional, impulsive, childhood behaviour are described. She punctually loses bladder or bowel control, steals, does food binges, abuses analgesics and presents behavioural disinhibition. She hardly understands another people's reasoning and she is often repetitive. The patient also presents mnesic disorders, trouble concentrating and difficulty sustaining attention.

**RESULTS:** Our patient's hospitalized in an Acute Ward, where is diagnosed with FvFTD with behavioural disturbances. Imaging tests support this diagnosis: There are signs of predominantly bifrontal corticosubcortical atrophy in the CAT-scan; and front-temporal underactivity with a probably neurodegenerative origin in the SPECT-scan. After adjusting medication, prescribing antipsychotics and antidepressants, there is an improvement in patient's adaptation, but not yet in repetitive behaviour, mnesic disorders and difficulty sustaining attention. Puerile and regressive attitude persists.

**CONCLUSIONS:** Behaviour disorder and personality disorder are typical in FvFTD. Eating disorders –food binges- and ethanol or tobacco abuse are very prevalent. In early stages, conventional neurological examination may be normal and also global cognitive abilities and memory may be preserved. However, executive capacities, verbal fluency, abstract thought and reasoning skills are affected. Behavioural and personality disturbances often prevail over cognitive deficits, which hinders early diagnosis. Emotional disturbances are often described already at the beginning of the disease and we have to differentiate it from low mood or hypomania.

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## AN UPDATE ON BEHAVIOURAL AND PSYCHOLOGICAL SYMPTOMS OF DEMENTIA: PATHOPHYSIOLOGICAL AND CLINICAL ASPECTS

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**Objective:** With an ageing population worldwide, dementia has emerged as a highly prevalent syndrome that comprises heterogeneous presentations of both cognitive and neuropsychiatric symptoms. At present, there is still insufficient knowledge about the aetiologies and management of Behavioural and Psychological Symptoms of Dementia (BPSD), while it is these non-cognitive complications that greatly increase the likelihood of patients requiring hospitalisation and long-term residential care due to negative impacts on functionality, activities of daily living and quality of life. The authors have reviewed current literature addressing neurophysiological basis and evidence-based management strategies of BPSD.

**Method:** Relevant articles have been identified through a MEDLINE/PubMed search for literature published over past three decades using key terms: “behavioural and psychological symptoms”, “BPSD”, “neuropsychiatric symptoms”, non-cognitive symptoms”, “dementia” and “Alzheimer's disease”. Particular emphasis has been placed on evaluating evidence on several major neuropsychiatric symptoms according to the Neuropsychiatric Inventory (NPI).

**Results:** Neuropathological findings indicate that formation of frontal plaques and neurofibrillary tangles are associated with delusions, agitation, aberrant motor behaviours and depression. Neuroanatomically, studies reveal that decreased regional grey matter density and increased cortical atrophy are associated with all of the neuropsychiatric symptoms investigated. Neurochemical evidence presents a picture of complex interactions between neurotransmitter pathways and behavioural symptoms elicited by disruption of these systems. Genetic studies have established essential roles of Apolipoprotein E polymorphisms in the heritability of delusions and depression, and amyloid-protein precursor genes in the heritability of agitation and apathy. In terms of management options for BPSD, combination of pharmacological and non-pharmacological strategies currently represents the most appropriate treatment of BPSD.

**Conclusion:** A review of the available literature suggests that profiles of regional brain abnormalities, neurotransmitter dysfunction and genetic predisposition contribute to the development of specific symptoms of BPSD, and each of these symptoms would be managed more effectively with individually targeted therapeutic approaches.

## ASSOCIATION OF ANKLE BRACHIAL INDEX AMONG THE ELDERLY WITH NORMAL COGNITION, AMNESTIC MILD COGNITIVE IMPAIRMENT AND ALZHEIMER'S DISEASE

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**Background:** Atherosclerosis is believed to be involved in the development of the most common type of dementia, Alzheimer's disease. Although a low ankle-brachial index (ABI) reflects the presence of atherosclerosis of the arterial walls in the lower extremities and is a good indicator of generalized atherosclerosis, data on cognitive prognosis of patients with a low ABI are limited.

**Objectives:** This study aimed to investigate the association of the ABI to several grades of cognitive impairment including normal cognition (NC), amnestic mild cognitive impairment (MCI) and Alzheimer's disease (AD)

**Methods:** Five hundred ninety five subjects (NC 100, amnestic MCI 291 and probable AD 204) aged 60 years old and over enrolled in the Dementia and Age-associated Cognitive Decline Clinic of an university hospital. The ABI was measured as a generalized atherosclerosis. The subjects were divided into 3 groups according to the ABI tertiles and a multivariate logistic regression analysis was applied to determine the association between the ABI and the grades of cognitive impairment. Measurement included various risk factors of cerebrovascular disorder.

**Results:** Subjects with NC were significantly younger than those with either of amnestic MCI or probable AD and well educated than those with probable AD. Subjects with NC also was higher in height and lower in body weight, systolic and diastolic blood pressure, serum total cholesterol, LDL cholesterol and various hemostatic factors. When the subjects were divided into 2 groups (NC versus aMCI and AD), after adjusting for confounding factors, the lowest ABI tertile was significantly associated with an increased risk of cognitive impairment such as aMCI and AD. (OR=2.65, 95%CI=1.43-4.95)

**Conclusions:** This study suggests that the ABI may be an independent risk factor for cognitive impairment and useful in identifying older individuals at higher risk of AD and amnestic MCI, a prodromal stage of AD.

**Key words:** Ankle brachial index, Alzheimer's disease, mild cognitive impairment, risk factor

Table 1: Demographic characteristic of the subjects

	normal cognition (n=100)	amnestic MCI (n=291)	probable AD (n=204)
Age(years)	69.1±5.4	72.8±6.3	74.1±6.9
Sex (male/female)	38/62	88/203	54/150
Education(years)	9.5±5.1	8.2±5.1	8.0±5.1
Body mass index(kg/m <sup>2</sup> )	24.2 ± 2.4	24.1±3.4	23.1±3.6
Total cholesterol(mmol/L)	82.9±32.2	83.7±37.3	80.4±37.5
LDL-cholesterol(mmol/L)	58.2±46.4	64.9±48.4	71.0±51.6
Triglyceride(mmol/L)	111.8±80.6	101.6 ±74.4	108.4±76.8
Current smoking(+/-)	6/94	17/274	9/195
Habitual alcohol intake(+/-)	36/64	76/215	44/160
Presence of cardiovascular disease(+/-)	4/96	37/254	9/195
Presence of hypertension(+/-)	52/48	147/144	92/112
Presence of diabetes mellitus(+/-)	18/82	65/226	38/165
Systolic blood pressure(mmHg)	133.0±20.1	138.2±18.9	135.1±19.2
Ankle brachia index	1.27±0.2	1.16±0.2	1.17 ±0.18

Values are mean±SD. ANOVA for continuous variables or chi-square test for categorical variables was used to evaluate the differences among 3 groups.  
MCI : mild cognitive impairment, AD : Alzheimer's disease  
\*: p<0.05



## **THE PLACE OF ELECTROCONVULSIVE THERAPY FOR MELANCOLIC PATIENTS WITH DEMENTIA**

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### **Objectif and method**

The work aims to study the therapeutic efficiency of electroconvulsive therapy (ECT) through three cases of patients suffering from melancholic depression associated to dementia treated by this therapy.

### **Results**

Our respectively 72, 66 and 63-year-old patients were followed for bipolar disorder or for a recurring major depressive disorder associated to dementia. They presented a severe relapse of their mood disorder resistant to the medical treatment, which indicates electroconvulsive therapy. The number of session varied from 9 to 16 sessions for every patient. Remission of the depressive symptoms was obtained also stabilisation or amelioration of the MMSE score.

### **Conclusion**

The frequency of the pharmaco-resistant forms of mood disorder especially the depressive one gives a dominating place for the electroconvulsive therapy which represents no contraindication for the aged subjects or having cognitive disorders which she can stabilize even to improve.

## THE PREVALENCE AND RISK FACTORS OF COGNITIVE IMPAIRMENT IN PATIENTS WITH DIABETES

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**Objectives:** Diabetes Mellitus has been associated with cognitive impairment, affecting learning and memory, mental flexibility, and mental speed.

Diabetes is highly prevalent in Saudi Arabia, with a reported range of 18 to 30%

.In this study we attempt to study the prevalence of cognitive impairment in an out-patient population of patients in a university hospital, and the possible risk factors.

**Methods:** A cross sectional study was carried out during June 9 to July 20, 2012 which included a total of 171 outpatients with diabetes, matched with 68 controls without. Volunteers underwent cognitive assessment using the Montreal Cognitive Assessment Test (MoCA), and the Rowland Universal Dementia Assessment Scale (RUDAS). Both the MoCA and the RUDAS have been validated by being compared against the Mini-Mental State Exam (MMSE). The MoCA has been found to have a specificity of 87% and a sensitivity of 90-100% (Nasreddine et al) the RUDAS has a specificity of 95.8% and sensitivity of 81% (Rowland et al). Cognitive assessments were carried out by researchers who were trained by experienced geriatricians prior to the study period.

**Results:** Among diabetics, 142 patients (83%) scored normal on the RUDAS and 29 (17.1%) scored below normal, compared to 65 control subjects (98.5%) with normal results and only 1 (1.5%) subject scored abnormal, p=.001.

The results were not significant when the MoCA was used, as 85.8% of the cases and 80.6% of the controls had abnormal results. P=0.337.

A highly significant correlation was observed between RUDAS and MoCA.

They also demonstrated a direct and significant correlation with the subjects' level of education and body mass index, and they both demonstrated an inverse, highly significant correlation with the age of the subjects. The waist circumference showed a direct but not statistically significant correlation with both RUDAS and MoCA.

RUDAS exhibited a direct but not significant correlation with Hb A1c levels, geriatric depression scores, and mean arterial pressure.

**Conclusion:** Cognitive impairment is more prevalent in diabetics than non diabetics. Older age and a limited education increase the risk, while a higher BMI might be protective.

RUDAS is a simple and quick test for cognitive impairment particularly in populations with limited education.

Table 1. Baseline Characteristics:

	Diabetics (N=171)	Controls (=68)
Mean Age (SD)	60.4 (8.76) years	56.3 (8.2) years
Females (%)	84 (49%)	33 (49%)
Mean years of education (SD)	6.34± 5.9 years	7.57 ± 6 years
Presence of depression (%)	37 (21.6%)	13 (19.1%)
Mean Arterial Pressure (SD)	101.99±17.6,	100.84±15.75
Cerebrovascular disease. (%)	18 (10.5)	4 (5.9)
Neuroactive Medications (%)	4 (2.3)	5(7.4)
Body Mass Index (SD)	31.8±6.6	32.1±6.9

## **ASSOCIATION OF BETTER EXECUTIVE FUNCTION WITH 5-YEAR RECOVERY OF GLOBAL COGNITIVE FUNCTION**

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### **Objectives**

We assessed 5-year recovery of global cognitive function and its correlates in a rural cohort of elderly individuals with cognitive impairment.

### **Methods**

A total of 751 subjects aged over 65 were followed for 5 years from 2008. The initial assessment involved a two-step diagnostic procedure performed during a door-to-door survey, and follow-up was conducted by the same methods. The relationship of baseline demographic, clinical, and cognitive characteristics with a recovery of global cognitive function was examined using the multivariate logistic regression model. Korean version of Mini Mental Status Examination (MMSE-KC) was used to examine global cognitive function, and Initiation/Perseveration (IP) subtest of Korean Dementia Rating Scale (K-DRS) was used to measure executive function. Short form Geriatric Depression Scale Korean version (SGDS-K) assessed depressive symptoms.

### **Results**

388 (51.7%) subjects participated in follow-up survey. 86 (22.2%) of them were -1.5SD below the normative data (adjusted by age, sex, and education) of MMSE-KC at baseline, however, half of them recovered to normal (above -1.5SD at 2013). Compared to the recovered elderly, the remained ones with abnormal scores were significantly older ( $p=0.012$ ), less educated ( $p=0.027$ ), and had lower scores on IP subtest of K-DRS ( $p=0.002$ ). In logistic regression model, elderly with relatively better scores on IP ( $\geq 20$ ) had greater tendency of recovery in global cognitive functioning even after controlling age, education, and depressive symptom (Adjusted odds ratio 5.24,  $p=0.006$ ).

### **Conclusions**

Though it is inconclusive whether dysexecutive function predicts cognitive decline or not, in our longitudinal community-based study, better executive function was associated with recovery of global cognitive function even after adjusting various confounders. This is a preliminary result of our dementia incidence study. Further investigation is needed to examine if executive function may affect incidence of dementia, especially, Alzheimer's disease or vascular dementia.

## **A CASE OF FRONTOTEMPORAL DEMENTIA**

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**Objetives:** Clinical study features and diagnostic difficulties of Frontotemporal Dementia (FTD)

**Methods:** Presentation of a case through retrospective longitudinal descriptive study.

**Results:** A 62 year old male presented in the last 4 months: conduct disorder with non-finalistic hyperactivity, stereotyped behaviors, violent behavior, sexual disinhibition and decreased sleep needs.

He had no significant medical history until 55. At this age, he starts being tracked after diagnosis of Neurology Alzheimer's disease, mainly characterized by clinical deterioration of executive functions. Discharged three months ago for having no significant memory impairment and negative imaging tests. In psychiatric screening for depressive symptoms since 56 years of age, this being considered as a reactive to early retirement after the diagnosis of Alzheimer. He also presents a harmful of alcohol.

From emergency service the patient enters Internal Medicine practice where an analytical and radiological study ruled out organic causes. He moved to the psychiatric unit where diagnosis and treatment of manic episode begins with olanzapine and valproic acid. After a month behavioral disorganization and emotional lability persist. Finally symptomatic attenuation is achieved with quetiapine. The deficit in executive functions was evidenced with a neuropsychological test and atrophy in frontal and temporal lobes on Magnetic Resonance Imaging lead to the diagnosis of FTD.

**Conclusions:** The FTD usually occurs before age 65. It progresses to death in approximately 4 years (one of the reasons that our case is interesting). It usually begins with symptoms of apathy, mental lability and impaired executive functions preserving the memory (misdiagnosis of depression). Other aspects appearing in a later stage: inadequate behaviors, sexual disinhibition, aggression, stereotyped behaviors and perseverations (Often diagnosed at this stage as mania). In many cases clinical changes positivization precede additional tests

## WERNICKE'S ENCEPHALOPATHY DUE TO MALNUTRITION IN A PATIENT WITH SEVERE DEPRESSIVE DISORDER

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**Objectives:** Wernicke's encephalopathy (WE) is an acute neuropsychiatric syndrome caused by thiamine deficiency that is associated with high morbidity and mortality.<sup>1</sup> The classic triad of ocular abnormalities, gait ataxia, and mental status changes is infrequently seen, and despite being a treatable condition, WE remains underdiagnosed, especially in nonalcoholic patients.<sup>2</sup> We report a case of WE in a patient with severe depressive disorder, aiming to highlight the importance of maintaining a high level of suspicion in all clinical conditions potentially leading to thiamine deficiency.

**Methods:** Case report.

**Results:** A 56 year-old patient with a longstanding history of depressive disorder was brought to the Emergency Department due to anorexia and food refusal. Over the previous 3 weeks he had become increasingly isolated and refused to eat or take his medication. He was disoriented, somnolent and uncooperative, and exhibited signs of dehydration. His bloodwork showed mild electrolyte imbalance and he remained in the hospital under treatment and observation. The next day, he developed vertical nystagmus and ophthalmoplegia. He underwent cranial magnetic resonance imaging, which showed bilaterally symmetrical increased T2 signal in the paramedian thalami, tectal plate and periaqueductal area. These findings are typical of WE, in this case likely caused by malnourishment due to food refusal. The patient was treated with high-dose intravenous thiamine for 7 days and symptoms gradually abated.

**Conclusions:** Patients with psychiatric illnesses can experience a delay in the diagnosis of comorbid medical conditions, including neurological disorders. Early presentation of WE is frequently nonspecific, but the diagnosis should be kept in mind in patients with dietary deficiencies, as prompt recognition is essential to ensure timely treatment. Knowledge of the typical imaging findings can assist in reaching the diagnosis in atypical cases.

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## TREATMENT APPROACHES OF MAINTENANCE THERAPY OF DEPRESSION IN ALZHEIMER'S DISEASE

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**Objectives.** Identifying depression in Alzheimer's disease can be difficult. There is no single test or questionnaire to detect the condition and diagnosis requires careful evaluation of a variety of possible symptoms. Clinically experience suggests that low doses of SSRI are much better than other approaches. In this study we wanted to investigate what therapy has better results as maintenance therapy of depression in Alzheimer's disease.

**Methods.** The total of 69 adult patients of both genders (37 females) with Alzheimer's disease and depression was treated either with sertraline p.o. 50 mg qd (n=37) or with escitalopram p.o. 10mg qd (n=32). Diagnosis of Alzheimer's disease was confirmed clinically and by CT. Diagnosis of depression was established with DSM-IV criteria and severity of illness was assessed with the use of HAM-D scale at baseline, after 2, 4, 6, 8, 14 and 26 weeks.

**Results.** The total HAM-D scores for sertraline group at baseline, 2, 4, 6, 8, 14 and 26 weeks were 26.35±6.33, 23.36±5.35, 21.89±4.64, 18.97±3.12, 17.36±3.32, 14.99±3.05 and 11.02±1.64, respectively (p<0.05). The total HAM-D scores for escitalopram group at baseline, 2, 4, 6, 8, 14 and 26 weeks were 25.96±5.11, 19.65±4.03, 18.12±4.07, 17.81±4.14, 17.74±4.64, 16.61±3.24 and 17.01±4.76, respectively (p<0.05). HAM-D scores of escitalopram group were lower than that ones in sertraline group at weeks 2, 4 and 6, and there was statistically significant difference at weeks 2 and 4, but they were not statistically significant different at week 6. Contrary to that sertraline group scores were statistically significant lower at weeks 14 and 26 (p<0.05). There were no differences in number of adverse events in study groups (2 vs. 2, p>0.05).

**Conclusions.** Sertraline as maintenance therapy was significantly effective in ameliorating of depression in Alzheimer's disease, with no additional risk for adverse events.

**Key words:** Alzheimer's disease, depression, SSRI, sertraline, escitalopram

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## **BEHAVIORAL AND PSYCHOLOGICAL SYMPTOMS OF DEMENTIA**

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**Objectives:** To make a theoretical review about the behavioral and psychological symptoms of dementia (BPSD).

**Methods:** Literature research in major databases: PubMed, Cochrane, Uptodate, using the keywords: behavioral and psychological symptoms of dementia.

**Results:** We present a case of a 79 year-old male patient that was bring from the nursing home because of carrying hazardous objects, and because he was thinking that people want to harm him. In the past history, he has diabetes mellitus, hypertension, hepatitis B and C and atrial fibrillation. He was also taking mirtazapine and escitalopram for depression symptoms; he had a previous admission in Psychiatry because of a suicide attempt.

He was in the hospital for 2 weeks, after adjusting the correct doses of psycothopic drugs, he can be discharged. At the end he recognized that he carried this objects to cut food (apples, oranges) so he can eat, he promised not to carry this kind of objects to the nursing home; also he denied feeling that people at the nursing home want to harm him.

He was discharged with haloperidol solution 1 mg three times a day. He was using multiple medications for his medical conditions.

**Conclusions:** BPSD are very common, they worsen patient condition, increase caregiver burden and accelerate the admission to nursing homes.

Proper handling of BPSD requires a correct characterization of the syndrome, discarding any medical or environmental condition and selecting the drug that is better for the patient.

## NEUROPSYCHIATRIC SYMPTOMS IN FAHR'S SYNDROME

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**Objectives** To explore, report and discuss a case of Fahr's syndrome, with emphasis on neuropsychiatric symptoms.

**Methods** Case study of a 78-year-old man with Fahr's syndrome, admitted in a psychiatric ward. Blood, urine and imaging tests were performed as well as electrocardiography, electroencephalography and neuropsychological evaluation. Update review of the literature namely in PubMed data base with the key words "Fahr syndrome/disease" was conducted.

**Results** On admission, the patient presented depressed mood, disorientation and restlessness. Cognitive and functioning impairment worsened during the last year. Acute symptoms were triggered by his recent wife's death. This paper is a clinical report and discussion in a patient with Fahr's syndrome, emphasizing neuropsychiatric manifestations, based on bibliographic review.

**Conclusions** Fahr's Syndrome is a rare degenerative neuropsychiatric condition, characterized by bilateral and symmetrical calcifications of the basal ganglia. It can be associated with several metabolic, infectious or genetic conditions. It is clinically manifested by movement disorders, psychosis, cognitive impairment, mood disorders, personality dysfunction or obsessive-compulsive spectrum disturbances. First presentation can be psychiatric in approximately 40% of the cases. Cognitive dysfunction, mood disorders and psychosis are the most common presentations. In the present case, depression, dementia and movement disorders were the main clinical pictures. This report alerts for the significance of neuropsychiatric symptoms within this diagnosis, considering the multisystemic approach of the illness.



## USEFUL EFFECTS OF ANETHUM GRAVEOLENS ON IMPAIRED MEMORY FUNCTIONS

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**Objectives.** Evidently glucocorticoid hormones influence memory. Estrogen is also a steroid that regardless of its obvious effects on females' reproductive functions shows beneficial effects on cognition. Anethum Graveolens (Dill) has phytoestrogen compounds; this research was performed in order to understand if this plant can improve memory.

**Methods.** Male NMRI mice weighing 25-30 g were used. To evaluate memory novel object recognition task was used, which comprised of three sections; habituation, first trial (T1) and the test trial (T2). In this method, the difference in the exploration time between a familial (F) object and a novel (N) object is taken as an index of memory performance (recognition index,  $RI = \{N - F/N + F\} \times 100$ ). Memory was impaired by anticholinergic effects of Scopolamine (0.5 mg/kg, sc) injected at the end of the first trial. Dill extract (60 mg/kg, ip) was injected 15 min prior T1.

**Results.** Memory was harmed by scopolamine ( $RI = -15.5\% \pm 3$ ). Dill considerably improved the impaired memory performance ( $RI = 40\% \pm 5.5$ ) and this was parallel with the memory index in normal animals ( $RI = 50\% \pm 5.8$ ). In addition, 17- $\beta$  Estradiol showed similar results in memory impaired animals (0.2 mg/kg, ip;  $RI = 35.8\% \pm 6.5$ ). However, the beneficial effects of dill were impaired by prior injection of tamoxifen (1 mg/kg, ip;  $RI = -30\% \pm 7.8$ ).

**Conclusions.** Dill improved memory impairment caused by scopolamine. Antagonising this effect by means of tamoxifen indicates that the beneficial effect of dill on memory is achieved by estrogenic receptors present in the brain. Although phytoestrogens are not steroids but prove to be promising in memory and cognition and can be used as adjuvant to prevent dementia.

## **DO WE DISCUSS PALLIATIVE CARE NEEDS IN DEMENTIA? A REVIEW OF PATIENTS ADMITTED TO A DEMENTIA INPATIENT PSYCHIATRIC UNIT OVER A ONE YEAR PERIOD**

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**Introduction:** Dementias are a progressive, eventually fatal, group of neurodegenerative diseases and are the leading predictor of mortality in older people in the developed world<sup>3</sup>. A Palliative care approach should be integral to the management of all non-curative diseases, so this should hardly be controversial idea in connection with dementia. Patients with dementia are less frequently referred to palliative care, prescribed fewer palliative medications, often have under treated pain, and are unlikely to have any assessment of spiritual needs before death<sup>4</sup>.

### **Objectives:**

1. To understand the current practice for patients with dementia and understand if palliative care needs are being met on an inpatient dementia unit.
2. To develop a guideline to appropriately address palliative care needs.

**Methods:** Review of all patients in a 1 year period admitted to a dementia inpatient psychiatric unit. We looked in to the following standards

- i. Were relatives involved in decisions and if decisions took place surrounding end of life care
- ii. Were “do not resuscitate” (DNR), preferred place of care, spiritual beliefs, advanced care planning and involvement of palliative care team discussed at any time during admission.
- iii. Were patients admitted to acute facilities during their stay and if these could have been reduced with palliative involvement.

**Results:** The data is being collected and analysed.

**Conclusions:** Adopting a Palliative care approach for patients with dementia can improve patient reported outcomes<sup>5</sup>. Momentum is gathering behind Palliative care in dementia but literature is only nascent. There remains no agreed way in which services should be provided despite recommendations from the European Association for Palliative care.

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## WHEN A GROWN MAN BECOMES CHILDISH: A CASE REPORT OF A FRONTOTEMPORAL DEMENTIA

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**Objectives:** To stress the importance of psychiatric features in frontotemporal dementia (FTD), through the description of a clinical case.

**Methods:** Case report of a 48 year-old-male with the diagnosis of FTD, and discussion on the etiology of the concurrent psychiatric features. Non-systematic review of literature.

**Results:** The authors report the case of a 48 year-old-male who, 15 years earlier, looked for psychiatric care referring lack of energy, insomnia, anxiety, alcohol and benzodiazepines abuse, impulsive behavior, overvalued ideas of persecutory nature, and memory loss. He was diagnosed with a depressive disorder and treated accordingly, with clinical benefit. By the age of 46 he consulted a neurologist about motor symptoms and was diagnosed with frontotemporal dementia. Some behavioral symptoms have gradually worsened and became clinically relevant, including altered dietary preferences, impaired social awareness, aggressive behavior, overspending, puerility, and impaired judgment. In March 2013 he was admitted in our inpatient unit presenting disruptive behavioral disturbance and poor insight. During the hospitalization, behavioral control was obtained due to psychopharmacological treatment optimization. After discharge the patient resumed Neurologic follow-up.

**Conclusions:** FTD refers to a group of degenerative dementias characterized by atrophy of the frontotemporal cortex. There is a behavioral variant, characterized by progressive changes in personality, social comportment and cognition. Manifestations of this disease include disinhibition, impulsivity, and bizarre dietary changes and habits, among other behavioral changes. The diagnosis is challenging, not only because of the disease's insidious onset, but also because the behavioural report, in the absence of neurological findings, may first suggest a psychiatric disorder. This leads to the delay of proper treatment delivery, with implications in the prognosis. This case allows debating on the importance of early recognition of psychiatric-like presentations of FTD by mental health professionals, and their contribution in the control of some symptomatic features of the disease.

## **MILD COGNITIVE IMPAIRMENT: EFFICACY AND SAFETY LONG-TERM TREATMENT WITH GALANTAMINE**

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**INTRODUCTION:** To evaluate the efficacy of galantamine in patients with Mild Cognitive Impairment. So there is a possible benefit in the deficit in executive and cognitive cerebral function (cholinergic system) with treatment with Galantamine.

**HYPOTHESIS:** galantamine is a reversible, competitive cholinesterase inhibitor that also allosterically modulates nicotine acetylcholine receptors. Cholinesterase inhibitors inhibit (block) the action of acetylcholinesterase, the enzyme responsible for the destruction of acetylcholine. Acetylcholine is one of several neurotransmitters in the brain, chemicals that nerve cells use to communicate with one another. Reduced levels of acetylcholine in the brain are believed to be responsible for some of the symptoms of Alzheimer's disease. By blocking the enzyme that destroys acetylcholine, galantamine increases the concentration of acetylcholine in the brain, and this increase is believed to be responsible for the improvement in thinking seen with galantamine. To evaluate the efficacy, safety and tolerability of galantamine in long-term in Mild Cognitive Impairment.

**METHODS:** a multicenter, open label, prospective, observational study enrolled 1088 patients, more 55 years old with Mild Neurocognitive Disorder (DSM IV criteria), during 36 months of treatment with galantamine 16 mg./day. (Extended release capsules: 16 mg.)

Assessments included the MMSE, CDR, ADAS-GOG, Trail making test, Raven Test, GO-NO-GO test, FAQ, Global Deterioration Scale, GCI and UKU scale of adverse effects.

**RESULTS:** a total 1088 outpatients were treated with 16 mg. /day galantamine during 36 months, the therapeutic response evaluated with CDR, MMSE and the tests and scales of function cognitive measuring, GCI and UKU scale of adverse effects, comparing the baseline to final scores.

**CONCLUSIÓN:** Mild Cognitive Disorder is being examined, so there isn't enough treatment for this. A long-term treatment (36 months) galantamine improves cognition and global function, behavioural symptoms and the general state well being of patients with Mild cognitive Disorder. With incidence of adverse effects not significant and a very good profile of safety, the final results of the study suggest that galantamine may be particularly appropriate in the Mild Cognitive Disorder.

**DISCUSSION:** We can recognize the Mild Cognitive Disorder as a clue which reveal a first therapeutic instance probably in efficacy in this cruel evolution towards dementia.

## **RATIONALE FOR COMBINATION THERAPY WITH GALANTAMINE AND MEMANTINE: THE EFFICACY OF TREATMENT OF ADDITION IN ALZHEIMER'S DISEASE**

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**Introduction:** Considering the moderate clinical state the Alzheimer's Disease, without therapeutic response or poor therapeutic response with an anti dementia agent, we try improvement the therapeutic response with 2 drugs association.

**Hypothesis:** The efficacy, safety, and tolerability of cholinergic agent: GALANTAMINE (with a dual mechanism of action on the cholinergic a system) and moderate affinity NMDA- receptor antagonist: MEMANTINE, were assessed taking into account the profile of patients with neurocognitive disorder: Alzheimer's disease, from the clinical aspects and the different classifications.

**Methods:** The experience included 528 patients who were enrolled in a prospective, observational, multicenter, and open-label study to receive 16 mg/day of galantamine and 30 mg/day of memantine for 12 months of treatment of addition.

**Results:** The therapeutic response was measured using the Mini Mental State Examination (MMSE), Clinical Dementia Rating (CDR), Alzheimer's Disease Assessment Scale (ADAS-GOG), Functional Activities Questionnaire (FAQ) the Clinical Global Impression Scale (CGI) and the UKU scale of adverse effects.

Taking into account the efficacy, safety and adverse events of the treatment, the final results of the study showed that galantamine with addition memantine improve cognition, behavioural symptoms, and the general well-being of patients with cognitive impairment: Alzheimer's disease. The incidence of adverse events was not significant and a very good profile of tolerability and safety was observed.

**Conclusion:** At the conclusion of this session, we should be able to demonstrate with use the association memantine - galatamine in neurocognitive disorder: Alzheimer's disease, improve cognition, behavioural symptoms, and the general state recognized as neurocognitive disorder.

**Discussion:** Suggest that before Alzheimer's Disease continues evolution to a severe state, the pharmacological use this association to slowing or stopping the dementia process.

## **EVOLUTION OF MEMORY DISORDER IN THE ELDERLY PEOPLE: THAT RECOVER, THE REMAINING STATIONARY AND THOSE THAT ARE IN DEMENTIA**

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**Introduction:** Even though most than a hundred years have passed since we know Alzheimer's disease today it's considered as the human's frightful flagellum. While most of mental disease seem to be losing its evilness, the neurocognitive disorders caused by Alzheimer's disease, far from attenuating has duplicated its appearance every each five years. And its symptoms are still being more depriving.

So, in opposition to the rest of the illness that affects the nervous system and the psychic apparatus, which due to the new treatments has been attenuated the clinical forms' Alzheimer. With its severe pronostic and the illness evolution, haven't been soften.

**Hypothesis:** Our intention is firstly, share some concepts to consider Alzheimer's disease as a cruel illness that can reach all the elderly people around the world.

Secondly, to analyze the different forms of presentation than can mask a clinical state. Which many times could end-up in dementia? And will soon destroy the whole psychic apparatus of a person.

**Methods:** present our study group in the four institutional medical centers, with ambulatory patients, who consult about a cognitive disease. We describe the evolution trough time, taking into account the pharmacological treatments. We included 1050 patients with diagnosis the Mild Cognitive Disorder and 458 patients with diagnosis the Alzheimer's Disease (DSM IV-TR criteria)

**Results:** the importance of the early detection of memory disorder, as one of the first signs of alarm which give us the opportunity to intervene therapeutically in on time.

**Conclusions:** We can recognize the Mild Cognitive Disorder as a clue which reveal a first therapeutic instance probably in efficacy in this cruel evolution towards dementia.

**Discussion:** In the presence of a disorder of memory in the elderly people, with the possibility of evolving towards dementia, we prefer to begin drug therapy early, preventive character.

## **MILD COGNITIVE DISORDER AND DEPRESSION: TREATMENT WITH ASSOCIATION BETWEEN GALANTAMINE AND ESCITALOPRAM**

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**INTRODUCTION:** To evaluate the efficacy of galantamine and escitalopram association in patients with Mild Cognitive Disorder and Depression. So there is a possible relation between the deficit in executive and cognitive cerebral function and depression or relation between the serotonin system and cholinergic system in relation with disease comorbidity cognitive-depression.

**HYPOTHESIS:** To evaluate the therapeutic response in patients with comorbidity between Mild Cognitive Disorder and Depression in treatment with Galantamine (acetylcholinesterase inhibitor) with Escitalopram (Selective serotonin reuptake inhibitors) and the two drugs associated.

**METHODS:** A group of 855 patients with symptoms of Mild Cognitive Disorder and Depression (DSM IV-TR criteria) were separated in 3 groups of 285 patients. Each group received different treatment in a 12 months period:

Group 1: Galantamine 16 mg/day. (Extended release capsules: 16 mg.)

Group 2: Escitalopram 10 mg/day.

Group 3: both drugs, same dose.

**RESULTS:** The therapeutic response evaluated in Hamilton Scale for Depression (HAM-D), Montgomery and Åsberg Depression Rating Scale (M.A.D.R.S.), Mini Mental State Examination (M.M.S.E.) and Global Clinical Impression (G.C.I.) scores during 12 months. In the third group who received the two drugs associated, had much better response than the others and "brain enhancer".

**CONCLUSION:** The group who received the association of the cholinergic agent Galantamine with antidepressant (SSRIs) Escitalopram had a relevant satisfactory therapeutic response: the best result, so there is a possible relation between the deficit in cholinergic systems and depression.

**DISCUSSION:** Could be cerebral cholinergic systems deficit a generator of Depressive Disorder?

## **LOS TRASTORNOS DE LA MEMORIA EN EL ADULTO MAYOR: PRÓDROMOS DE SU EVOLUCIÓN. LOS QUE SE RECUPERAN, LOS QUE PERMANECEN ESTACIONARIOS Y LOS QUE VAN A UNA DEMENCIA.**

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Luego de compartir algunos conceptos que nos llevan a considerar actualmente a la demencia de Alzheimer como una enfermedad que azota cruelmente a la población de adultos mayores de toda la humanidad, con índices de incidencia y prevalencia prácticamente epidémicos, analizamos sus actuales formas de presentación y los diferentes tipos de consulta de los trastornos cognitivos, que pueden enmascarar un estadio clínico que muchas veces podría ser la antesala de una feroz demencia, que comience disminuyendo las capacidades cognitivas y ejecutivas de una persona y termine, en poco tiempo, con la total destrucción del aparato psíquico de la persona.

Luego de éste análisis, presentamos nuestra casuística como investigadores clínicos, con pacientes ambulatorios que consultan por trastornos cognitivos, en 4 centros de trabajo asistencial institucional. Realizamos un análisis estadístico con nuestros pacientes en tratamiento ambulatorio y seguimiento durante 3 años de evolución. En un estudio multicéntrico, observacional, abierto y prospectivo, evaluamos a 1028 pacientes (635 mujeres y 393 hombres) con diagnóstico inicial de Trastorno Cognitivo Leve y 387 pacientes con diagnóstico de Demencia tipo Alzheimer. Describimos la evolución de cada grupo a lo largo del tiempo, con la realización de tratamientos farmacológicos.



## **UNDERDIAGNOSIS OF DELIRIUM IN PATIENTS OVER 64 YEARS ADMITTED IN A GENERAL HOSPITAL**

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### **OBJECTIVES:**

To determine the diagnostic agreement between the subject of consultation and diagnosis of delirium in patients admitted in medical and surgical plants, which were derived to Psychogeriatric Program.

### **METHODS:**

Data of all patients seen during 2013 were collected. Statistical analysis was performed using SPSS 12.

### **RESULTS:**

227 hospitalized in both medical and surgical, that were referred to the program Psychogeriatric patients were analyzed. Of these, 41 were diagnosed with delirium, but only appeared as a reason for consultation in 11 patients (26.8%). Other consultation finally diagnosed as Delirium by the Program were: Depression in 8 cases (19.5%), psychosis in 6 cases (14.6%), Conduct disorders in 8 cases (19.5%) and Attempted Suicide in 3 patients (7.3%). Other query accounted for 12.3%.

### **CONCLUSIONS:**

According to the results we can assert that there is significant under-diagnosis of Delirium among elderly patients hospitalized which is often confused with other psychiatric disorders. Delirium is one of the most important causes of morbidity and mortality in older adults admitted, resulting in a longer stay, higher costs of hospitalization, increased risk of institutionalization at discharge and the risk of cognitive impairment. It is very important adequate awareness among professionals of surgical medical services that allow for early detection of patients at risk, establishing prevention and early treatment of the symptoms and the causes that originate it.

## **DESCRIPTIVE STUDY OF HOSPITAL DISCHARGED IN A REHABILITATION UNIT OF DEMENTIA DIAGNOSED PATIENTS**

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**OBJECTIVES:** Analyze and study admissions of patients with dementia in a psychiatric rehabilitation unit.

**METHODS:** Review of the clinical records whose discharged diagnostic was due to dementia according to DSM-IV-TR in patients admitted among 1995 and 2013 in Psychiatric Rehabilitation Unit in Zaldibar Hospital, Bizkaia.

**RESULTS:** 72 patients were found with dementia diagnosis. From all of them, the variables associated with the socio-demographic data were studied: age, level of school attendance, labour condition, place of residence, recognized disability and caregiver profile; the ones associated to clinical data: dementia family background, diagnosis, psychiatric and organic associated pathologies. Finally, variables linked to the hospitalization characteristics were analyzed: hospitalization cause, patient referral, willingness, number of hospitalizations and average length.

### **CONCLUSIONS:**

1. The socio-demographic profile of a patient with dementia admitted in a rehabilitation unit is a male or female, with an average age of 63 years, with primary studies, married, living in the family home, being the family his main cares, pensioner.
2. The clinical profile of a patient with dementia who is accepted in a rehabilitation unit is a patient with a dementia caused by alcohol, without any psychiatric family background, but with important organic background and without previous attempts to it suicide.
3. The hospitalization profile of the patients matches with a patient that is accepted for the first time, due to behavior disorders, from psychiatry intensive cares unit and who remains hospitalized 563 days.

## **RETROGENESIS MODEL IN AD PATIENTS' DRAWING PERFORMANCE**

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**Objectives:** According to “retrogenesis model”, AD patients present a stepwise regression to their cognitive functioning from a mature adult to that of an infant. Present study aimed to detect whether a similar regression is observed in AD patients' drawing ability.

**Methods:** 10 AD patients and 10 adult controls, as well as 40 children, divided into 4 age groups (4-, 6-, 8-, and 10-years old) participated in the study. They were asked to draw from memory two drawing tasks (a man and a tree behind a house), that are often portrayed in children's spontaneous drawings.

**Results:** Analysis showed that AD patients drawings' were similar to those created by the 4-year olds, with which they shared common characteristics (e.g. omission of details, simplification, disorganization) and differed significantly from those produced by all other groups (6-, 8-, 10- years old and adult controls).

**Conclusions:** Findings reveal some specific neuropsychological deficits of AD patients and seem to support the “retrogenesis model” according to which degenerative mechanisms in AD reverse the order of achievement in normal development.

## **DIOGENES SYNDROME**

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**Objectives:** To make a theoretical review about Diogenes Syndrome.

**Methods:** Literature research in major databases: PubMed, Cochrane, Uptodate, using the keywords: Diogenes Syndrome.

**Results:** We present a case of Diogenes Syndrome. This patient is a 62 year-old male that was seeing as an outpatient for the first time, her sister in law accompanied him. He said that he was very concerned that they were going to be sentenced to life imprisonment. Her sister in law said that he was wandering around the town, when she went to his house; there were a lot of garbage and useless objects. She said he lives socially isolated, and that he is a self neglected person. Apparently he burned money 4 months ago, because he didn't want that nobody keep this money after he kills himself. In the emergency room a CT scan and blood test were performed, with normal results. The patient was hospitalized for about 4 weeks, after adjusting medications (neuroleptics and antidepressant) he can be discharged. We need the help of the town's social worker to go and see his house. He accepted the help that they were offered him at the town to live in better conditions.

### **Conclusions:**

Diogenes syndrome refers to a condition with distinct self boarding behaviours, severe self-neglect, and social isolation.

A broad range of co-morbidities exist; between a third to a half of patients suffer from dementia, or some type of mental disorder (most commonly schizophrenia, personality disorder, affective disorder or alcoholism).

Recognition of this condition is important as it helps to individualize treatment plans (pharmacotherapy, cognitive and behavioural strategies).

## **A COMPARISON OF THE EFFECTS OF ATTENTION DEFICIT ON REHABILITATION FUNCTIONAL OUTCOMES IN BRAIN TUMOR PATIENTS AND SUBACUTE STROKE PATIENTS**

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**Objective:** To evaluate the cognitive impairment of brain tumor and subacute stroke patients using computerized neuropsychological testing and determine the effects on functional outcomes of daily activity.

**Methods:** From April 2008 to December 2012, 55 patients (29 brain tumor patients, 26 subacute stroke patients) were enrolled. All patients were assessed with a computerized neuropsychological test. Motricity Index, Korean-mini mental status exam, and Korean-modified Barthel index scores were assessed at the beginning and end of 4-week rehabilitation.

**Results:** Functional outcomes of all patients significantly improved after rehabilitation therapy. In brain tumor patients, the initial Motricity Index, cognitive dysfunction, and visual continuous performance test correction numbers were strong predictors of initial daily activity function ( $R^2 = 0.778$ ,  $P < 0.01$ ). The final Motricity Index and word-black test were strong predictors of final daily activity function ( $R^2 = 0.630$ ,  $P < 0.01$ ). In patients with subacute stroke, the initial Motricity Index was an independent predictor of initial daily activity function ( $R^2 = 0.245$ ,  $P = 0.007$ ). The final Motricity Index and word black test were strong predictors of final daily activity function ( $R^2 = 0.630$ ,  $P < 0.01$ ).

**Conclusions:** Objective evaluation of cognitive function and comprehensive rehabilitation should be performed in brain tumor patients.

## **USE OF ATYPICAL ANTIPSYCHOTICS IN DELIRIUM ARE THEY MORE EFFECTIVE AND SAFER THAN TYPICAL ?**

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### **Introduction:**

Delirium is a generally abrupt clinical onset in which an impairment of attention and other brain functions occurs . May occur in up to 40 % of patients admitted to intensive care unit

Clinical manifestations fluctuate throughout the day. Very different symptoms such as disorientation , agitation , drowsiness , hallucinations may occur.

It is particularly common in hospitals and the elderly or patients with pre-existing disease .

It should first rule out systemic causes : infectious, metabolic , toxic and drug .

### **Methods :**

The literature sources Were Obtained through Electronic search of articles in PubMed data base of the last five years .

### **Discussion:**

It was found atypical antipsychotic That are Effective and safe in treating.

Haloperidol compared showed similar efficacy.

On the effectiveness of preventive treatment of this condition in patients with risk factors the results are inconclusive.

**Key words :**Atypical antipsychotic , delirium , efficacy

## **SLEEP DISORDERS IN ALZHEIMER DISEASE: A LITERATURE REVIEW**

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### **Objectives:**

The authors propose to do a literature review about sleep disturbances in Alzheimer's disease

### **Methods:**

Pubmed search with the following keywords: "Alzheimer disease"; "sleep disorders in dementia"; "Behavioral and psychological symptoms of dementia"; "circadian dysrhythmias"

### **Results:**

Sleep is disturbed early in the disease process and it has been suggested that sleep and cognitive dysfunction are positively correlated.

Disruption in sleep-wake patterns, rhythmicity, increased amounts and frequency of night time wakefulness, and reduction of slow wave sleep occur in Alzheimer disease (AD). In later stages there is reduction of slow wave sleep and REM sleep resulting in daytime sleepiness.

Nocturnal exacerbation of disruptive behavior or agitation is named as "sundowning", and remains a common cause of institutionalization in AD patients.

Sleep apnea it is frequently comorbid with neurodegenerative diseases and should be considered as a potentially reversible cause of dementing illness, and/or a contributing factor to worsening cognition. Periodic limb movements in sleep may also cause sleep disruption.

Medication use in AD patients, can contribute to poor sleep.

### **Conclusions:**

Sleep disturbances in AD are frequently reported and remains a common cause of institutionalization.

Identification and treatment of underlying sleep disturbances therefore provide an additional opportunity to reduce caregiver burden and, potentially, to decrease the rate of institutionalization and associated costs.

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## **DESCRIPTIVE STUDY OF OUTPATIENT CONSULTATION TO THE PSYCHOGERIATRIC PROGRAM IN A GENERAL HOSPITAL**

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### **OBJECTIVES**

The objective of this study is to describe the characteristics, reason for consultation and diagnosis of the patients who were attended in our outpatient psychogeriatric program during the past year.

### **METHODS**

Information was gathered from the database of patients attended in our program during the year 2013. Statistical analysis was realized with the SPSS 12 program.

### **RESULTS**

The total population for our study was 162 patients, 70,4% being new patients. 15,6% of the patients did not attend to their first appointment. Half of the patients were in the range from 70 to 79 years old and 76,5% of them were women.

Most outpatient consults came from Oncology and Internal Medicine (29% of patients both). The most frequent reason for consultation was depression (51,2%), followed by behavioural disorders (13%). Affective disorders were the most frequent diagnosis (38,3%) followed by dementia (22,2%) and adjustment disorders (12,3%). The percentage of patients who had no psychiatric diagnosis was 4.9%.

### **CONCLUSIONS**

The population attended was mostly women and the most frequently observed reason for consultation and diagnosis were affective disorders. Cognitive impairment was underdiagnosed, having been previously diagnosed in only 3,7% of cases. After the evaluation in our program, this percentage increased to 22,2%.

We observed few cases of suicidal ideation (1,9%) and there was no suicidal ideation or suicidal intention during treatment on the program. This information could be related with the excellent adherence to the program, however this hypothesis needs further data and later studies.

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## VASCULAR NEUROCOGNITIVE DISORDER

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**Objectives:** Analyze a case of vascular neurocognitive disorder and focus on the importance of an adequate differential diagnosis with other psychiatric disorders.

**Methods:** A 50 year old patient was admitted to the Short-Term Psychiatric Unit (STU), because of behavioral variations. Past medical history has shown that the patient was admitted to the Neurology department in August 2013 with Transient Global Amnesia. The patient was previously admitted 3 times to the Detoxification Unit due to the consumption of alcohol and cocaine with a secondary diagnosis of mixed personality disorder.

During the last 10 days, the family notices the patient is restless, impulsive, and saying incoherencies with automatic responses. One day, without any trigger, the patient opens the window and starts to throw things to the street and jumps from one balcony to the next. Patient was admitted in the STU and symptoms of anxiety and dysphoria are shown.

**Results:** A neuropsychiatric study shows that there is an important neurocognitive dysfunction in the area of the executive functions. A Brain MRI is conducted and shows hyper intense injuries in T2 sequences in the white matter compatible with ischemic phenomena in the small vessel. The diagnosis at the discharge is neurocognitive disorder due to small vessel disease secondary to cocaine consumption.

Treatment is started with duloxetine 120mg /day, olanzapine 15mg/ day, and citicoline 1 ampoule/day normalizing the patient's behavior and as a result the patient became euthymic at the day of discharge.

**Conclusion:** The neuropsychiatric symptoms could erroneously be interpreted as a primary psychiatric disorder and that is why a good clinical history with complementary neuroimaging proof is essential in order to make a correct diagnosis.

## **ADDENBROOKE'S COGNITIVE EXAMINATION — REVISED FOR THE ESTIMATION OF COGNITIVE DISORDERS ASSOCIATED WITH EPILEPSY**

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**Objectives:** Use of Addenbrooke's cognitive examination-revised (ACE-R) to evaluate the cognitive disorders associated with epilepsy (CDAWE) in general medical practice. Neuropsychological tools plays important role in differentiation of CDAWE .However it is far not always accessible in the conditions of territorial polyclinic or somatic in-patient department. As a result the indexes of exposure of cognitive disorders in general medical practice remain subzero, especially when diagnostics is base on only the clinical impression of doctor. All of it stipulates the necessity of application for general medical practice of simple and reliable psychometric instruments for early diagnostics of cognitive disorders. One of the methodologies worked out for these aims is modified Addenbrooke"s Cognitive Examination — Revised» — ACE-R.

**Methods:** The study was conducted in two steps at somatic hospitals and city polyclinics. It enrolled 31 patients with (18 men and 13 women) with epilepsy spectrum disorders. Work did not include patients with a mental backwardness, violations of physical development and chemical addictions. Diagnostics was conducted by doctors-psychiatrists.The psychometric characteristics of ACE-R and the possibilities of its use were estimated to detect CDAWE. The differences in the spectrum of cognitive impairments were analyzed in patients with different types of CDAWE.

**Results:** ACE-R is shown to be an effective neuropsychological tool for the primary diagnosis detection, and evaluation of CDAWE in the general medical network. The results of ACE-R use indicate that the spectrum of cognitive impairments has substantial differences in patients with different types of CDAWE.

**Conclusions:** ACE- R showed a high sensitiveness for patients with epilepsy,it can be used for an estimation both clinically outlined organic and subclinical cognitive disorders.

## **RIGHT TEMPORAL LOBE ATROPHY: A VERY PSYCHIATRIC DEMENTIA**

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**Objectives:** To describe the clinical profile associated with predominantly right-side temporal lobe atrophy and to support the existing suggestion of it, as a separate syndromic variant of Frontotemporal Dementia (FTD)

**Methods:** We will describe a case report of an 77 year-old man without a psychiatric or neurological history who came into the psychiatric emergency service of the Hospital Universitario de Canarias because of some behavioural disorders and psychotic symptoms.

**Results:** The patient exhibited a variety of psychiatric symptoms such as behavioural disorders including social disinhibition, irritability and aggressive behaviour, impulsiveness, bizarre alterations in dress and affects and eccentricity. There were also psychotic symptoms such as visual hallucinations. Hyper-religiosity was also a symptom. The most prominent cognitive deficit was impairment of episodic memory. He had also prosopagnosia and anosognosia. By TAC-RMN we could see a frontotemporal atrophy, specially on the right hemisphere.

**Conclusions:** Frontotemporal dementia is a dementia syndrome with diverse clinical characteristics and it is currently associated with three syndromic variants. Disorders of speech and language figure prominently in two of the three variants, and are associated with left-sided frontotemporal atrophy. The detailed characterization of these syndromes contrasts with the relative paucity of information relating to frontotemporal lobar degeneration primarily affecting the right cerebral hemisphere. The combination of clinical features associated with predominant right temporal lobe atrophy differs significantly from those associated with the other syndromes associated with focal degeneration of the frontal and temporal lobes and it is, therefore, proposed that this right temporal variant should be considered a separate syndromic variant of frontotemporal lobar degeneration. More studies are necessary.

## **EFFECTIVENESS OF A MULTIFACTOR EDUCATIONAL INTERVENTION ON DELIRIUM INCIDENCE AND LENGTH OF STAY IN PATIENTS WITH CARDIAC SURGERY**

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**Objectives:** Delirium is a common problem among patients with open heart surgery admitted to intensive care units. This study aimed to assess effectiveness of a multifactor intervention on delirium prevention and length of stay in patients with open heart surgery.

**Methods:** In this semi-experimental study, we first recruited 195 patients. Among them, 15 patients were excluded during the study due to different reasons. The participants were divided into to study groups. The implemented intervention included staff education, environment changes, and installation of guideline reminding on ward. Patients were assessed for delirium twice a day using the CAM-ICU scale. Demographic characteristics as well as disease and sleep items were completed by the researchers a day before surgery. Moreover, length of stay was recorded by the researchers. Data were analyzed using Pearson Chi-Square, Independent Samples, and the Fisher's Exact Test.

**Results:** A significant decrease was found in the incidence of delirium in the intervention group: 11.1% Vs 35.6% ( $P < 0.05$ ). Average length of stay in the control and intervention groups was 6.23 Vs 6.30 days, respectively. Length of stay among patients with delirium and patients without delirium was 7.5 Vs 5.8 days, respectively. Patients with delirium were aged 55 and more in both groups.

**Conclusions:** Multifactor intervention was effective in decreasing the prevalence of delirium. Educational interventions are recommended to improve staffs' knowledge and environment changes.

**Key words:** multifactor intervention, delirium, prevention, length of stay

## **CONSULTATION LIAISON PSYCHIATRY AT KENYATTA NATIONAL HOSPITAL**

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**Objective:** To describe the psychiatric services offered at Kenyatta National Hospital and the types of patients and cases seen at Kenyatta National Hospital.

**Methods:** A retrospective study based on case notes and other hospital records. Setting: Kenyatta National Hospital, Nairobi, Kenya Subjects: All patients seen in the various psychiatric clinics and those who attended the Patient Support Centre Unit of the hospital in the year 2002. Method: Data was derived from the hospital records and the patient's files.

**Results:** In the year 2002, 598,119 patients were treated at KNH out of which 1.15% was seen in psychiatric clinics: 1,709 adults and 1,412 children were referred to the various psychiatric clinics. At the hospital's Patient Support Centre (PSC) 3,454 patients were seen, mostly for pre- and post-HIV test counselling. Consultations from the wards accounted for 332 (9.6%) of the cases referred to PSC. The main diagnoses among the latter in order of frequency were alcohol related psychiatric disorders, acute and transient psychoses, depressive disorders, dissociative and conversion disorders, and dementia.

**Conclusion:** In view of the high load of acute and transient psychotic states, as well as substance related disorders, it is recommended that the hospital should establish acute wards for the comprehensive management of such patients. An alcohol and drug detoxification and rehabilitation centre should also be developed at the hospital. Services to those with HIV-related disorders should also be improved.

## PSYCHOLOGICAL DISTRESS IN FAMILIES OF ELDERLY HOSPITALIZED PATIENTS WITH DELIRIUM

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**Objectives:** Delirium is a common and complex neuropsychiatric syndrome, affecting 50% of elderly hospitalized patients. Several studies have reported that delirium is described as a psychologically traumatic experience, not only for patients, but also for their families and caregivers. The aim of the present study is to analyze studies of the level of distress caused by delirium in the family and/or caregivers.

**Methods:** A non-systematic review of published articles in the database PubMed between 2000 and 2012 was carried out. The keyword "Delirium" was combined with the terms "distress", "impact" and "family", "carer", "relatives". Inclusion criteria were: diagnosis of delirium with standardized criteria and/or assessment instruments, and assessment of the level of distress in a systematic and prospective way in families of patients with delirium. Studies not carried out in English and clinical cases were excluded.

**Results:** The search strategy yielded thirty-eight articles. From these, only eleven met the inclusion criteria for analysis. In general, family members showed quite high levels of psychological distress, even higher than that reported by health professionals and by patients. These levels were associated to the worsening of the patient's medical condition, the presence of psychomotor agitation, psychotic symptoms and emotional lability. Beyond that, family members interpreted delirium as a sign of approaching death, the result of pain/discomfort or the effects of medication.

**Conclusions:** The experience of delirium may increase the risk of families suffering psychological distress. A better understanding of these negative consequences will contribute to the development of appropriate supportive interventions in order to reduce distress in these relatives.

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## GENETICS IN ALZHEIMER'S DISEASE AND COGNITIVE RESILIENCE

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### Objectives

1. Evaluate the hypothesis that states that the APOE genotype influences the development of Alzheimer's Disease (AD).
2. Evaluate SNPs risky for AD and develop a pattern of genetic risk.
3. Propose a new concept of Cognitive Resiliency (CR), which would dynamically show that the same injury to some individuals develop disease (less resilient) and others not (more resilient).

### Methods

The genotype for APOE was determined through the PCR-RFLP technique.

Trial population:

1) Patients with AD: The clinical diagnosis was made pursuant to the NINCDS-ADRDA criterion (n= 127, 45 men and 82 women).

2) Controls >65 years old: subjects with no history of neurological diseases (n= 42, 16 men and 26 women)

Age (mean±SEM): 1) 74±1 y 2) 74±2

### Results

A significant relation was found between Apo-E4 allele and AD. In addition patients with vascular injury and/or brain hypoxia have an increased risk in the beginning of the physiopathology of AD. Apo-E4 would be a risk factor for the vascular injuries, leaving an unprotected brain.

The selection of SNPs for constructing a pattern of risk for AD is under study.

### Conclusions.

APOE genotypes 3/4 and 4/4 would be a risk factor for the development of AD.

In our proposal of a new concept for the term "CR", genetic risk factors are included as components of it.

In this way, before the same injury, subjects with APOE genotypes 3/4 and 4/4 would develop a dementia more frequently than those who don't have them.

The concept of CR is of key importance where before the same injury, some patients develop the pathology and others don't. It is in this framework that the measurement of APOE, not only when there are symptoms but also when there are risk factors, particularly cardiovascular and/or metabolic, could become a useful marker to indicate a prevention treatment for a dementia syndrome which, once installed, is irreversible.

## DO APOE4 CARRIERS HAVE AN ALZHEIMER-DISEASE METABOLIC PATTERN?

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**Objectives.** A few reports, mostly from the same group, have indicated that healthy carriers of the APOE4 allele, which are at increased risk of developing late-onset Alzheimer's disease (AD), have decreased metabolism on <sup>18</sup>F-fluoro-deoxy-glucose (FDG) positron emission tomography (PET) in regions affected by AD. Healthy APOE4 carriers were also reported to have regional atrophy and impaired functional connectivity on MRI. However, recent MRI studies with larger samples have been negative, equivocal or found the effect only in women. Recent work has emphasized the discordance between a strong APOE4 effect on amyloid deposition in the brain and its doubtful effect on atrophy. Independent reports on its effect on metabolism are scant. To better define the effect of APOE4 carrier status on metabolism, we set out to determine it in a large sample.

**Methods.** FDG-PET and MR images of 162 cognitive normal elderly with known APOE genotype information were downloaded from the Alzheimer Disease Neuroimaging Initiative (ADNI) database. In voxel-based analyses, FDG-PET maps were compared between APOE4 carriers and non-carriers. In addition, FDG-PET and MRI from 40 non-carriers and 40 patients with AD, matched by sex and age, were compared to validate our analysis. T-contrasts, implemented in SPM8, were used to determine the effect of APOE haplotype on metabolism.

**Results.** There were 103 APOE3 homozygotes (average age 71.5 years; 56% female) and 59 APOE4 carriers (71.1 years; 55% female). Relative to non-carriers, carriers did not have decreased metabolism even at a liberal threshold ( $p < 0.01$  uncorrected). Our AD sample showed the typical AD pattern of reduced metabolism (FWE-corrected  $p < 0.05$ ) in posterior cingulate gyrus, precuneus and lateral parieto-temporal association cortex.

**Conclusions.** Even with standard PET methodology, a liberal statistical threshold, and a large sample size, we were unable to confirm previously suggested AD-like patterns of cerebral metabolism in healthy APOE4 carriers.



## DEMENTIA WITH LEWY BODIES FOLLOWING TAKOTSUBO CARDIOMYOPATHY – A CASE REPORT

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Takotsubo Cardiomyopathy (TTC) can occur after an acute mental stress. It is characterized by transient systolic dysfunction of the apical and/or midventricular segments in patients without coronary artery disease. Dementia with Lewy Bodies (DLB) is a progressive dementia characterized by the neuropathological finding of Lewy bodies in the cerebral cortex and a characteristic clinical profile.

**Objectives:** We propose to present the case of an adult woman who presents a DLB following a TTC based on a brief review of available literature.

**Methods:** Clinical information gathered from the patient, family and clinical file. Non-systematic literature review through Pub Med.

**Results:** After presenting in the emergency room with chest pain, showing an electrocardiogram with ST-segment elevation and deep T-wave inversions the patient was diagnosed with a TTC. Cardiac catheterization showed a left ventricle with an ejection fraction of less than 30% without coronary artery disease. The patient was discharged in the following week after supportive treatment with a normalized left ventricle function.

Two months later she was admitted in our inpatient ward due to behavioural disturbances. According to data collected with the family she presented a substantial cognitive decline in the prior six months that interfered with her independence in everyday activities. During the stay the patient revealed a fluctuating cognition with pronounced variations in attention and alertness, as well as recurrent visual hallucinations. Moreover the patient showed a severe neuroleptic sensitivity.

**Conclusions:** Very few descriptions were made of cases where TTC and DLB appear to be associated. According to our Pub Med review only four articles were published relating TTC with dementia. All of these are case reports and were published in the last five years. It is our view that this relation requires to be further investigated in the years to come.

## NEUROANATOMICAL CORRELATES OF AWARENESS OF ILLNESS IN PATIENTS WITH AMNESTIC MILD COGNITIVE IMPAIRMENT WHO WILL OR WILL NOT CONVERT TO ALZHEIMER'S DISEASE

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**Objectives:** Illness awareness may be reduced in mild cognitive impairment (MCI). This may have a detrimental effect on illness course and may be a predictor of subsequent conversion to AD. Although neuropsychological correlates have been widely investigated, no evidence of a neuroanatomical basis of the phenomenon has yet been reported. This study was aimed at investigating the neuroanatomical, neuropsychological and neuropsychiatric correlates of illness awareness in amnesic MCI to determine whether they constitute risk factors for conversion to AD.

**Methods:** A sample of 36 first-diagnosis amnesic MCI patients were followed for five years. At baseline they were administered an extensive diagnostic and clinical procedure and the Memory Insight Questionnaire, measuring a total index and four sub-indices, to investigate awareness of deficits in dementia; they also underwent a high resolution T1-weighted MRI investigation. Grey and white matter brain volumes were analyzed on a voxel-by-voxel basis using Statistical Parametric Mapping 8. Data of converter patients (CONV) were compared with those of non converter patients (NOCONV)

**Results:** Reduced self-awareness in CONV correlated with reduced grey matter volume of the anterior cingulate (memory deficit awareness), right pars triangularis of the inferior frontal cortex (memory deficit awareness) and cerebellar vermis (total awareness), whereas in NOCONV it correlated with reduced grey matter volume of left superior (total awareness) and middle (language deficit awareness) temporal areas. Further, at baseline self-awareness of memory deficits were poorer in CONV than in NOCONV.

**Conclusions:** Defective self-awareness is underpinned by different mechanisms in CONV and NOCONV amnesic MCI patients. Our data support the hypothesis that poor self-awareness is a predictor of subsequent conversion to AD and suggest that anosognosia shares the same pathogenic mechanisms in different neuropsychiatric disorders

## **WPA-0212 ARE THERE CONNECTIONS BETWEEN LANGUAGE DEFICITS AND COGNITIVE SLOWING IN ALZHEIMER'S DISEASE?**

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**Background:** Language processing deficits occur already on the early phases of Alzheimer's disease. As the central cause, problems of working memory and executive functions are discussed in the recent research literature. Aims: Cognitive slowing is also repeatedly addressed. Are there connections between language deficits and cognitive slowing in Alzheimer's disease?

**Methods:** The results of 72 healthy controls and 52 AD patients were examined with regard to their language performance (understanding of (a) homonyms, (b) idioms, and (c) definite pronouns - the tests are aimed to the availability of context information in working memory). In addition, the response times in a computerised Stroop word-colour paradigm were collected.

**Results:** When compared to the control group, the AD patients showed significantly worse results in all language tests as well as much longer reaction times in all Stroop conditions (basal conditions: 1,78 / 1,77 x controls, interference condition: 2,52 x controls). In addition, in the AD group, both the number of errors in the speech tests and the response times in the interference condition of the Stroop test correlated with the severity (MMSE); and there was a correlation between the number of errors in two language tests ((a) homonyms and (b) idioms) with the reaction times in the interference condition of the Stroop.

**Conclusion:** The positive correlation of linguistic deficits and response times is of particular interest: Perhaps the working memory, which is limited in time, is overwhelmed by cognitive slowing. Or the slowdown of executive Processes leads to a disintegration of basal and higher processing steps.

## **WPA-0442 CHANGES OF CELLULAR METABOLISM IN PATIENTS WITH ALZHEIMER'S DISEASE**

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### **Objectives**

According to increasing evidence, mitochondrial dysfunctions contribute to the pathogenesis of Alzheimer's disease (AD); mitochondrial abnormalities and alterations in mitochondrial enzyme activities were observed. In our study, cellular respiration and mitochondrial enzyme activities in blood platelets were examined in AD patients and compared to healthy controls. The aim was to find out, whether kinetics of oxygen consumption and enzyme activities are modified.

### **Methods**

Respiratory rate of mitochondria was determined electrochemically, using oxygraph with Clark-type electrodes. Activities of citrate synthase and complexes I, II and IV of electron transport chain were measured spectrophotometrically.

### **Results**

Mitochondrial respiration was significantly decreased; both physiological respiration and capacity of electron transfer system were decreased in patients with AD compared to controls. Activities of citrate synthase and complex IV were significantly decreased; activities of other respiratory chain complexes were not significantly changed.

### **Conclusions**

We propose that both decreased oxygen consumption and complex IV activity participate in pathophysiology of AD. The decrease of mitochondrial respiration was not markedly associated with the AD progression (cognitive deficit). Respiratory rate, citrate synthase and complex IV in blood platelets could be included in panel of AD markers.

## **WPA-0454 VALIDATION STUDY OF THE MINI-MENTAL STATE EXAMINATION IN AN URDU LANGUAGE FOR PAKISTANI POPULATION**

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### **Background:**

This study was conducted primarily to validate and determine the optimal cutoff score in the diagnosis of dementia among Pakistanis and study the effects of gender and education on the MMSE performance in our population.

### **Methods:**

Four hundred participants took part in the study. Of these, 100 were dementia patients and 300 were non-dementia participants. Patient with dementia recruited from five major hospitals from Pakistan. The MMSE was translated into Urdu. In order to determine the optimal cutoff scores, the sensitivity and specificity were calculated.

### **Results:**

There were 61 men and 39 women in dementia group and 225 men and 75 women in the control group. The mean score of Urdu MMSE were lower in patients with dementia  $18.5 \pm 5.6$  (range 0-30) as compared to the controls  $26.8 \pm 2.6$  (range 7-30). This difference between groups was statistically significant ( $p < 0.001$ ). Subjects with illiterate and up to 10 grades had significantly lower mean scores in patients with dementia group compare to those with higher education ( $p < 0.001$ ). Educational based MMSE score below 15 yielded perfect sensitivity and specificity for the diagnosis of dementia.

### **Conclusions:**

These findings confirm the influence of level of education on MMSE score and education stratified cutoff scores should be used while screening for cognitive impairment in this population.

## **WPA-0443 LEVELS OF AN AMYLOID BETA42 SURROGATE MARKER IN CSF OF FAMILIAL ALZHEIMER DISEASE PATIENTS**

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### **Background and aims**

Amyloid- $\beta$ 42 peptide ( $A\beta$ 42) is a major constituent of senile plaques in Alzheimer disease (AD) brain. Substantial amounts of  $A\beta$ 42 accumulate in brains of familial AD patients with Presenilin 1 (PS1) mutations. It is easy to assume that the accumulation is caused by increased  $A\beta$ 42 secretion. However, if  $A\beta$ 42 secretion does not increase in the brain, we need to reconsider the process by which substantial  $A\beta$ 42 accumulation occurs. PS1 mutations-associated with FAD generally increase  $A\beta$ 42 to  $A\beta$ 40 ratio secreted in cultured cells. Some of PS1 mutants reduce secretion of  $A\beta$ 40 rather than increase that of  $A\beta$ 42. Since it has been difficult to estimate  $A\beta$ 42 secretion in brains of PS1-FAD patients due to  $A\beta$ 42 accumulation, it remains unknown whether enhanced  $A\beta$ 42 ratio in brains of FAD patients is caused by elevated  $A\beta$ 42 secretion or reduced secretion of major  $A\beta$  species. We tried to address this issue by using a non-aggregatable  $A\beta$ 42 surrogate marker, APL1 $\beta$ 28.

### **Methods**

Cerebrospinal fluids (CSF) of PS1-FAD patients and neurological control patients were collected. Levels of CSF APL1 $\beta$ 28 were quantified by LC/MS/MS to estimate  $A\beta$ 42 secretion in the brain.

### **Results**

The relative ratio of CSF APL1 $\beta$ 28 to total APL1 $\beta$  was higher in PS1-FAD patients than in control. Importantly, APL1 $\beta$ 28 was not significantly higher and the other shorter APL1 $\beta$  species were significantly lower.

### **Conclusion**

Higher ratio of CSF  $A\beta$ 42 surrogate in PS1-FAD patients may not be due to its increase in CSF. Massive  $A\beta$ 42 accumulation in PS1-FAD brain may occur without an increase in  $A\beta$ 42 secretion.

## **WPA-0445 FACTORS ASSOCIATED WITH CLOZAPINE INDUCED CONSTIPATION: A CASE CONTROL STUDY**

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### **Background and Aims**

17 percent of patients must discontinue treatment with clozapine because of adverse effects. Constipation is common adverse effect with high mortality but is a poorly researched adverse-effect of clozapine.

### **Methods**

A case control study in a tertiary care center in Karnataka district of India was performed after approval from the institutional ethics committee. Psychiatric patients on clozapine formed cases (n=50) and those not on clozapine formed controls (n=50). Demographic profile, Prevalence, duration and dose at onset of constipation along with most effective treatment for constipation was studied. World gastroenterology definition for constipation was used along with tools like constipation assessment scale (CAS), anticholinergic burden scale (ABS), Bristol stool chart. All adverse effects were studied using clozapine checklist.

### **Results**

Prevalence of constipation was significantly ( $p=0.001$ ) greater in cases (54%) as compared to controls (22%). Constipation was significantly ( $p= 0.05$ ) severe in cases as compared to controls. Patients on clozapine needed longer recovery duration as compared to controls. The median dose was 300 mg and median duration between starting of clozapine treatment and onset of constipation was 60 days.

### **Conclusions**

Constipation was one of the most common adverse effects of clozapine. Constipation was commonly observed at dose of 300mg of clozapine and around 60 days after starting of drug. Clozapine induced constipation was more prevalent, more severe and required longer recovery duration as compared to constipation induced by other psychiatric medications. Increased prevalence of adverse effects were seen with divided dosing as compared to single dosing.

## **CSF CYSTATIN C LEVELS ARE CORRELATED WITH CSF P-TAU181 LEVELS IN ALZHEIMER'S DISEASE BUT NOT IN DEMENTIA WITH LEWY BODIES**

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### **Objectives**

Alzheimer's disease (AD) and Dementia with Lewy bodies (DLB) are the common forms of late-life neurodegenerative. Neurofibrillary tangle is a neuropathological hallmark of AD, and amyloid plaque is present in patients with AD and majority of patients with DLB. Recently, Cystatin C (CysC) has been shown to bind soluble amyloid- $\beta$  (A $\beta$ ) peptides and inhibit its aggregation in a concentration-dependent manner in vitro. We have reported that CSF CysC levels are decreased in both AD and DLB, and positively correlated with CSF A $\beta$ 40 and A $\beta$ 42 levels in AD and controls but not in DLB. The present study aimed to explore potential link between CSF CysC levels and CSF phosphorylated tau at threonine 181 (p-tau181) in AD and DLB.

### **Methods**

We included 43 AD, 26 DLB and 30 control subjects. The CSF CysC levels were quantitatively measured by a latex immunoturbidimetric assay using CysC reagents (Dako, Denmark) with an auto-analyzer (Architect C8000; Abbott Laboratories, Abbott Park, IL, USA). The CSF A $\beta$ 40 and A $\beta$ 42 levels were quantified using commercially available enzymeimmunoassay kits (Innogenetics, Belgium).

### **Results**

Our results showed that CSF CysC levels were significantly lower in patients with AD ( $3.57 \pm 1.23$  mg/L,  $P < 0.001$ ) and DLB ( $3.31 \pm 0.73$  mg/L,  $P < 0.001$ ) than in controls ( $5.09 \pm 1.36$  mg/L). CSF CysC levels were positively correlated with CSF p-tau181 in AD ( $r = 0.408$ ,  $P = 0.007$ ), controls ( $r = 0.575$ ,  $P = 0.001$ ), but not in DLB ( $r = 0.245$ ,  $P = 0.227$ ).

### **Conclusions**

These results, in combination with our previous report, suggest that CysC is correlated with both p-tau181 and A $\beta$  in both AD and control subjects. However, no correlations between CSF CysC and either CSF p-tau181 or A $\beta$  were observed in patients with DLB. It is possible that there are potential interference factors that break the correlations of CysC with p-tau181 and A $\beta$  in DLB brain. Further studies into these factors are required.





Topic

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# Diagnostic Systems

abstracts - volume 2

## **PRELIMINARY STUDY TO DEVELOP KOREAN MEDICINE PATTERN IDENTIFICATION TOOL FOR DEPRESSION**

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### **Objectives**

The purpose of this study is to develop a standard tool of pattern identification in Korean Medicine for depression.

### **Methods**

The advisor committee on this study was organized by 15 Korean Medicine neuropsychiatry professors of 11 Colleges of Korean Medicine. The items and structure of the tool were based on review of published literature. For develop the tool, we took consultation through 2 times discussed of the advisor committee and we also took additional advices by e-mail.

### **Results**

1. We divided the symptoms and signs of depression into 11 pattern identification - stagnation of liver qi, dual deficiency of the heart and spleen, relieving stagnation of phlegm-qi, qi-deficiency mingled with sputum, stagnant qi transforming into fire, liver-yin deficiency, blood stasis due to qi stagnation, mind disorder, Heart-yin deficiency, the melancholy lot of trouble, yin deficiency with effulgent fire.
2. We got the mean weights that reflect standard deviation to each symptom of 11 pattern identification which had been scored on a 100-point scale by 15 experts.
3. We designed the Korean medicine pattern identification tool for depression. It was composed of 66 questions in question-and-answer form.

### **Discussion**

There are some points to be considered in this study. First, we couldn't reach a complete agreement to the concept of 11 patterns. Second, each pattern identification has different number of symptoms and signs. Also, and the items of symptoms and signs of each pattern identification are unequal. Third, as we did not set any clinical trial using this tool, we couldn't test validity and reliability of this tool yet.

### **Conclusions.**

Preliminary edition of Korean Medicine pattern identification tool for Depression was developed through our study for the first time. Though there are some limits in this study, developing of pattern identification tool for depression through discussion of advisor committee is meaningful.

### **Acknowledgements :**

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## DIAGNOSTIC STABILITY IN A PSYCHIATRY DAY-HOSPITAL

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**Objectives:** Diagnostic stability over time is an important issue in clinical practice since it may influence the treatment choice and the final outcome. Patients referred for treatment in Day-Hospital usually have a previous variable period of follow-up in ambulatory or hospitalization setting, commonly, with an established diagnosis, which might be investigated and reviewed according to hospitalization proposal, as well as clinical evaluation and evolution during the period of partial hospitalization. The objective of this study is to evaluate the diagnosis stability among patients treated in a Psychiatry Day-Hospital.

**Methods:** Selection of patients admitted to Coimbra Hospital and University Centre Psychiatry Day-Hospital in the period between January to December 2013, analysis of their clinical data and admission and delivery diagnosis (International Classification of Diseases, 10th revision) were compared for each patient.

**Results:** 92 patients received psychiatric treatment in the period of study. 68,5% were women and 31,5% male. The average patient age was 42 years and mean hospitalization time was 50 days. The most frequent admission diagnostic category was mood disorders (61,3%), generally a unipolar depressive episode, moderate in intensity (40%). At moment of clinical discharge of the unit, 90% of all diagnosis remained the same with no significant differences between diagnostic categories. Those patients with a diagnostic changed had less time of previous psychiatric follow-up and/or a hospitalization proposal for diagnostic investigation. Results suggest a high level of stability of all diagnostic categories in the Day Hospital setting.

**Conclusions:** Diagnostic stability provides the chance of planning more accurate treatment strategies in a psychiatry day-hospital and better outcomes.

## VALIDATION OF THE STRAUSS CARPENTER SCALE FOR BIPOLAR DISORDER

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### Objective

Bipolar disorder is a chronic disease that causes functional impairment. It is characterized by cyclic changes in mood, in which patients goes through depressive episodes or manic or hypomanic phases, interspersed with periods of euthymia or stabilizing. The objective was to validate a short questionnaire (Outcome Scale Strauss-Carpenter) for measuring functionality in Spanish population with bipolar disorder, comparing it with Clinical Global Impression Scale, Bipolar Modified (CGI-BD-M) and the Global Functioning Scale (GAF).

### Method

98 patients were included with bipolar disorder type I and II, aged between 18 and 65. They were assessed at baseline and at one year from the inclusion in the study, and sociodemographic and clinical data were obtained.

### Results

Of the 98 patients, 66.3% were men and mean age was 29 years. The internal consistency (Cronbach's alpha) for the 5 items of Strauss at baseline and at one year were 0.67 and 0.68 respectively. The convergent validity at baseline (Pearson correlation) was  $r=0.050$  ( $p=0.628$ ) with GAF and  $r=-0.246$  ( $p=0.015$ ) with CGI-BD-M. At one year, the correlations were  $r=0.647$  ( $p<0.001$ ) with GAF and  $r=-0.627$  ( $p<0.001$ ) with CGI-BD-M. The test-retest reliability was analyzed with the Pearson correlation and the Intraclass Correlate Coefficient (ICC). For the Strauss, the correlation was  $r=0.435$  ( $p<0.001$ ) and the ICC=0,61 ( $p<0.001$ ), 95% CI: 0,409 – 0,736. For GAF,  $r=0,248$  ( $p=0,014$ ) and the ICC= 0,38 ( $p=0,010$ ), 95% CI: - 0,077 – 0. Finally, for the CGI-BD-M the correlation was  $r=0,35$  ( $p=0,001$ ) and the ICC=0,51 ( $p< 0,001$ ), 95% CI: 0,270 – 0,675. The area under the curve (AUC) was 0.82 (95% CI 0,744 – 0,906) wich indicates good discriminant validity.

### Conclusion

The Strauss Carpenter Scale for bipolar disorder has appropriate psychometric characteristics for this population, both in reliability and in validity. Therefore, it is an adequate short instrument for assessing functioning and symptomatology, and to detect changes in this population.

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## THE STRUCTURE OF MOOD AND ANXIETY SYMPTOMS IN THE GENERAL POPULATION: RESULTS IN THE ESEMED SURVEYS

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**Objectives:** Categorical models of psychopathology are increasingly challenged by evidences that disorders exist on a dimensional continuum. However, most results come from data at the disorder level, and results based on symptoms are scarce. Here, we explore the dimensional structure of the symptoms of Major Depression Episode (MDE), Generalized Anxiety (GAD) Panic Disorder (PD) in a general population sample.

**Methods:** We analysed higher-order factor models, and unidimensional and bifactor models of General Psychopathology to explore the comorbid structure of DSM-IV symptom criteria of MDE (9 symptoms), GAD (8 symptoms) and PD (13 symptoms). Symptoms were assessed with the Composite International Diagnostic Interview 3.0 in the European Study of Epidemiology of Mental Disorders, a cross-sectional interview survey representative of non-institutionalized adult general population in six European countries (N=21,425). We tested model fit with standard criteria (RMSEA<0.05, CFI>0.95, TLI>0.95). Among the good-fitting models, we selected the one with lowest Sample-Size adjusted bayesian information criteria (SSBIC). Using ROC Analyses, we estimated the AUC, maximum Sensitivity and Specificity of model-based scores for detection of active disorders as indicated by DSM-IV criteria.

**Results:** All models achieved satisfactory fit save for the unidimensional model (RMSEA=0.10, CFI=0.94, TLI=0.94). Among the remaining models, the lowest SSBIC was obtained for a Quadripartite Bifactor Model (1 General Psychopathology factor + 3 specific disorder factors). Model scores achieved excellent predictive ability for detecting active episodes of MDE (AUC=0.95; Sensitivity/Specificity =0.99/0.80), GAD (AUC=0.99; Sensitivity/Specificity=0.99/0.96) and PD (AUC=0.99; Sensitivity/Specificity =0.99/0.99). Higher scores in the general factors associated with higher probability of all disorders.

**Conclusions:** A Quadripartite model with a General Psychopathology factor explained the expression of Major Depression, Generalized Anxiety and Panic symptoms in the general population. Dimensional scores allowed accurate diagnosis in terms of taxonomical systems. These results add evidence to the existence of a general psychopathology diathesis with specific syndromic manifestations.

## CONCURRENT PSYCHIATRIC RELATED ISSUES IN CANADIAN ADULTS WITH BRAIN INJURIES

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**Objective:** This study describes the prevalence of lifetime traumatic brain injury (TBI), and co-occurring psychiatric related problems among Canadian adults in a population sample.

**Method:** A cross-sectional sample of 1,999 Ontario adults aged 18 to 93 were surveyed by telephone in 2011 as part of Centre for Addiction and Mental Health's ongoing representative survey of adult mental health and substance use in Canada. TBI was defined as trauma to the head that resulted in loss of consciousness for at least five minutes or overnight hospitalization.

**Results:** An estimated 16.8% (95% CI: 14.8, 19.0) of adults reported a TBI in their lifetime in 2011. The prevalence of TBI was higher among men than women. Adults with lifetime TBI had significantly higher odds of past 12 months smoking (AOR=2.15), using cannabis (AOR=2.80) and nonmedical opioids (AOR=2.90), as well as reporting elevated psychological distress (AOR=1.97) in the past few weeks, than adults without TBI.

**Conclusion:** The co-occurrence of lifetime TBI with reports of elevated psychological distress and drug and substance use warrants vigilance among medical practitioners to assess the possibility of past TBI during reviews of the history leading to the occurrence of psychiatric conditions. The magnitude of the prevalence estimates and associated risks identified within this representative sample warrant improvement of the understanding, prevention, and response to TBI among adults.

Table 1. Reported tobacco, drug use and mental health by Ontario adults with (n=326) or without (n=1662) Traumatic Brain Injury (TBI), 2011 *CAMH Monitor*

	Adults without TBI % (CIs)	Adults with TBI % (CIs)	OR (95% CI)	AOR (95% CI)
<i>Total</i>	83.2 (81.0,85.2)	16.8 (14.8,19.0)		
Smoking <sup>a</sup>	13.1 (11.3,15.2)	27.5 (21.5,34.4)	2.51** (1.74, 3.62)	2.15** (1.47, 3.14)
Cannabis use <sup>a</sup>	11.1 (9.1,13.4)	27.6 (21.2, 35.0)	3.05** (2.03, 4.59)	2.80** (1.79, 4.39)
Non-medical use of prescribed opioids <sup>a</sup>	3.0 (2.1, 4.2)	8.8 (5.1,14.9)	3.14* (1.58, 6.23)	2.90* (1.50, 5.59)
Elevated psychological distress <sup>b</sup>	13.0 (11.1,15.2)	22.5 (17.0,29.1)	1.93* (1.31, 2.85)	1.97* (1.32, 2.95)

Notes: Unadjusted odds ratios (OR) and Adjusted odds ratios (AOR) were calculated using logistic regression. AOR were evaluated while holding fixed values of age, sex, marital status, family income, and education;\*\* P < 0.001; \* P < 0.01; <sup>a</sup> Past 12 months; <sup>b</sup> Past few weeks.

## **OBSESSIVE-COMPULSIVE DISORDER WITH LACK OF INSIGHT / WITH DELUSIONAL BELIEFS: DSM-V, PREVALENCE AND PROGNOSIS. A CASE REPORT.**

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**OBJECTIVES:** The main goal of this study is to look over the clinical prevalence level specification "With the absence of introspection / with delusional beliefs" and impact on the prognosis of patients with this disorder, given the introduction of the DSM-V criteria in OCD spectrum.

**METHODS:** We proceed to the description of a patient diagnosed with severe OCD. A literature search through Pubmed was consulted in order to clarify the diagnosis. The keywords "obsessive-compulsive disorder" and "insight" have been looked up and the search filter was limited to publications in the last 5 years. We focused on systematic reviews and the new Diagnostic Manual of Mental Disorders DSM-V.

**RESULTS:** The prevalence of OCD is 1-3% in the general population (Ruscio, Stein, Chiu et al, 2010). It is estimated that 21.7% of patients diagnosed with OCD have little insight (Catapano et al, 2010). In patients with psychotic disorders, there has been a comorbidity with OCD of 12.6%, and obsessive-compulsive symptoms in 25% (Oullis, et al, 2013). Among the changes introduced by the DSM-V, three possible specifications of introspection appear in OCD (Leckman et al, 2010). This change may be an improvement in diagnostic clarification, and a better prognostic approach.

The new DSM-V specification "with no insight / with delusional ideation" is described through a case.

### **CONCLUSIONS**

The literature review highlights that the lack of adherence to treatment worsens the prognosis in population with low introspection. This feature should be considered in treatment planning, extending from a connection with mental health facilities, to an appropriate involvement of the patient's social environment.

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## **A CASE REPORT OF A PURE CHRONIC HALLUCINATORY PSYCHOSIS**

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### **Objectives**

To report the clinical case of a patient meeting the original concept of a chronic hallucinatory psychosis, as it was described by J. Séglas and M. Dide.

### **Methods**

Case report of a 57-year-old man suffering from a chronic hallucinatory condition. The patient was assessed through a non-structured clinical interview in order to reach a diagnosis, and kept on follow-up since.

### **Results**

The patient reports hearing hallucinatory voices, as well as tactile sensations of a hand pulling his ears for the last six years. He has been treated with antipsychotic medication, exhibiting a partial symptomatic remission, and keeps a full understanding of the situation, as being a disease which needs to be treated. He even considers a life event as the starting point for his illness. He shows minimal functional and social impairment, remaining married and employed.

### **Conclusions.**

The fact that there is no secondary delusional elaboration on the perceptual phenomena suggests that this case belongs to the clinical group depicted by french authors, in the beginning of the 20<sup>th</sup> century, namely one by J. Séglas, that led M. Dide to label this disorder as “chronic hallucinatory psychosis”. However, in a further development, G. Ballet used this name for a chronic psychotic condition in which a secondary delusion is triggered by hallucinations. The fact that this case doesn't fit in any positive nosological category rises some questions regarding the frontiers of illness.



## DIAGNOSTIC CONSTANCY AND INTERCHANGE OF SCHIZOPHRENIC DISORDER AND BIPOLAR DISORDER: A 10-YEAR FOLLOW-UP STUDY

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**Objectives:** The change of a psychiatric diagnosis in clinical practice is not an unusual phenomenon and might be due to variations of clinical features, duration of illness, change of diagnostic criteria, and the training background of the clinicians. In this study, we used national wide population-based sample to compare the diagnostic constancy and interchange rate between schizophrenic disorder and bipolar disorder.

**Methods:** There were 28567 newly diagnosed as schizophrenic disorder (295.xx) patients and 10443 newly diagnosed as bipolar disorder (ICD-9-CM: 296.xx, excluding major depression (296.2 296.3, 296.8)) were retrospectively enrolled from sub-dataset of National Health Insurance claim database, called Psychiatric Inpatient Medical Claims database (PIMC) between January 1, 2001 and December 31, 2005. We followed up these two cohorts to the end of 2010 to evaluate if their diagnoses keep consistency in the following hospitalizations. We analyzed the change rate by one year period to identify the trend of diagnosis changes between bipolar disorder and schizophrenic disorder in ten-year duration.

**Results:** In schizophrenic disorder cohort, the overall diagnostic constancy rate was 84.6% and the change rate to bipolar disorder was 7.6% in ten-years' follow-up. If we look into the subtype, the change rate from schizoaffective type to bipolar disorder was 24.1%. In the bipolar disorder cohort, the overall diagnostic constancy rate was 68.6% and change rate to schizophrenic disorder was 19.7%; in them 6.7% was schizoaffective type. We found that the change rate was highest during the first year, and then continue to decrease in the following periods in both cohorts. Younger patients have higher change rate than older patients.

**Conclusions:** The diagnosis of schizoaffective disorder is the least stable. It is suggested that when making a psychotic diagnosis, the clinician should be aware that it is possible that the diagnosis might be changed in the future.

## ¿QUÉ PACIENTES INGRESAN EN NUESTRA UNIDAD DE HOSPITALIZACIÓN?

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**Objetivos:** Medir el número de ingresos que se realizan en la Unidad de Hospitalización Breve de Psiquiatría del Hospital Nuestra Señora del Prado de Talavera de la Reina, midiendo el porcentaje por sexo y patología mental que motivo el ingreso.

**Material y métodos:** Se trata de un estudio descriptivo transversal retrospectivo. Con los datos de todos los pacientes ingresados en la UHB durante el año 2013. En este estudio analizaremos el sexo y la patología psiquiátrica.

**Resultados:** El número total de pacientes ingresados durante el año 2013 asciende a 334 ingresos, de los cuales el 52,4% de los pacientes ingresados eran mujer y el 47,6% eran hombres. En cuanto a la patología de mayor prevalencia en los pacientes hospitalizados destacamos como diagnóstico principal los trastornos del humor, suponiendo el 42% de los paciente ingresados durante el año 2013, seguido de los trastornos psicóticos que supusieron 28% de los ingresos hospitalarios.

Cabe destacar la presencia de elevada comorbilidad en los pacientes que ingresan en las Unidades de Hospitalización Psiquiátrica, donde la presencia de dependencia a sustancias en nuestra unidad la presentan el 33% de pacientes que ingresaron, así como los trastornos de la personalidad, presente en un 29% de los pacientes ingresados.

**Conclusión:** Tras obtener los resultados, llegamos a la conclusión de que más del 50 % de los pacientes ingresados en nuestra unidad durante el periodo del año 2013, presentaban patología de rango afectivo o psicótico, que se englobaría dentro de las patologías mentales de mayor gravedad. La prevalencia de elevadas tasas de comorbilidad nos hace incidir en la necesidad de un adecuado abordaje multidisciplinar del paciente que padece una patología mental, ya que mucha de la patología comórbida encontrada son diagnosticadas en nuestra unidad, debido al escaso seguimiento ambulatorio de un porcentaje elevado de paciente con patología mental grave.

## **INTERVENTIVE PSYCHODIAGNOSIS IN AUTISM: A CASE STUDY**

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### **Objectives**

This study describes a case study of a child diagnosed with autism who was referred to psychological assessment to provide school consistent orientation on dealing with his difficulties and potentialities.

### **Methods**

One child (aged 6) diagnosed on the autism spectrum since the age of 2.6 who was in speech therapy was submitted to psychological assessment. An interventive psychodiagnosis approach was used. Vineland Adaptive Behavior Scale, Quality of Life Evaluation Scale, Autism Diagnostic Interview – Revised, The Wisconsin Card Sorting Test, Raven's Coloured Progressive Matrices, The Drawing-Stories procedure from Walter Trinca and The House Tree Person test were used. The choice of themes and characters for playing, exploratory behavior, ability to deal with conflicts, understanding and respect for rules were evaluated through games.

### **Results**

Failures in communication, social interaction, perseverative answers in cognitive tasks and in choosing themes when playing were found. The subject needed to keep attending the speech therapy sessions for the refinement of his communicational competencies but he also needed to be referred to psychological treatment to broaden his behavioral repertoire to deal with daily demands at school, at home and in social interaction situations. Some activities were suggested to exercise his cognitive flexibility, self-monitoring and the ability to solve cognitive and relational conflicts. The deficits in the three areas that characterize autism are affected by many factors, other than the presence of the disorder such as chronological age, developmental level, specific language functioning, and the behavioral repertoire of the subject. A categorical assessment was not sufficient to provide the required support, so a psychological assessment with a dimensional approach was an important tool in achieving a comprehensive description of the case. The collaborative dimension adopted helped both psychologist and parents choose strategies on how to deal with the potentialities and difficulties of the subject.

## **FILE REVIEW OF THE DIAGNOSTIC STABILITY OF VARIOUS PSYCHOTIC DISORDERS IN A COMMUNITY MENTAL HEALTH CENTER IN SOUTH INDIA**

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### **Objectives**

To review(file based) the diagnostic stability of various psychotic disorders over time in a community mental health care center in south India.

### **Methods**

- Retrospective file review of 10 years for all cases with the ICD - 10 based diagnosis of psychotic disorders in community mental health center.
- Total numbers of files screened = 250.
- Total numbers of files included for the study: 59.
- Reasons for non-inclusion of the remaining files:
  - I. Presence of mental retardation.
  - II. Presence of independent affective symptoms.
  - III. Poor records & poor subsequent follow up.
  - IV. Recently diagnosed cases less than 6 months old.

### **Results**

Socio-demographic profile: Males: 27; females: 32. Age group: 20-35years (45%). Rural background (43%). Married (54.3%). Distance <40km (67.2%) & brought by a family member at the first contact, less than 4% were referred by a general practitioner.

Insidious onset illness with prominent positive, negative & behavioral symptoms was the presenting complaints at initial diagnosis in nearly 50% of cases. Most (48%) were ill & untreated for one year, & about a third had a past history of mental illness. Initial diagnosis: Psychosis Not Otherwise Specified [(NOS), 68%] & Schizophrenia spectrum disorders (30.5%). Final diagnosis: Schizophrenia spectrum disorders (61%) & Psychosis NOS (29%). Shift of diagnosis: towards schizophrenia spectrum disorders (30%). Reasons for change of diagnosis: appearance of new symptoms (22%), reevaluation of history (17%) & poor drug compliance (14%). Mean duration of follow-up in months: 17.

**Conclusions:** Schizophrenia is under-diagnosed in the first contact. With time there is a shift towards it and is the most stable diagnosis over time.

## **GENDER DYSPHORIA - GENDER DYSPHORIC PERSONALITY DISORDER?**

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### **Objectives**

The need of destigmatization in psychiatry is quite understandable. However, extracting gender dysphoria as a core nosologic concept in DSM 5, defining the phenomenon in separate category where it stands for itself as a gender dysphoria over at least six months is an important nosologic issue. The latter is questioned by, at least, a classical psychoanalytic epistemology related to psychophysiological development and maturation of a human being predestined to form a stable sense of identity after inevitable childhood, puberty and early adolescence crises.

As WHO is heading toward 11<sup>th</sup> revision of ICD an important suggestion is to be presented in relation to this nosologic issue.

### **Methods**

The research is based on in depth observation and contemplation of phenomenon defined as gender dysphoria in DSM 5. The fact of gender dysphoria by large being treated by hormones and surgery is taken in consideration as well.

### **Results**

Results of this theoretic and empirical investigation strongly point out that due to our insufficient knowledge, previously we classified gender dysphoria as a sexual identity disorder nosologically defined as transsexualism. Our actual knowledge clearly points out to the fact that gender dysphoria is a personality disorder with etiopathogenesis most possibly rooted in specific endocrinologic foetal status.

### **Conclusions**

- a) Gender dysphoria appears more adequate terminological solution than transsexualism.
- b) Extraction of gender dysphoria from personality disorders in DSM 5 is a lapsus apparently not adequate to be verified in ICD 11.
- c) In ICD 11 gender dysphoria should be classified adequately, that is as gender (dysphoric) personality disorder.

## DIAGNOSTIC STABILITY OF CYCLOID PSYCHOSIS IN PATIENTS WITH FIRST-EPIISODE PSYCHOSIS: A THREE-YEAR PROSPECTIVE STUDY

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**Objectives** The concept of cycloid psychosis includes some acute, recurrent and benign psychotic disorders whose symptoms are not typically affective or schizophrenic, but essentially polymorphous. Given the importance that the diagnostic stability of the cycloid psychosis have for the clinical validity's demonstration of the construct, a more global approach and prospective follow-up of first psychotic episodes are needed and not only of cycloid episodes.

**Methods:** In a prospective 3-year follow-up study, eighty patients with a First Psychotic Episode (FPE) diagnosed with schizophreniform disorder, schizophrenia, or schizoaffective disorder were studied. Detection of possible cases of cycloid psychosis was made according to Perris & Brockington's operational diagnostic criteria. Two groups of "cycloid" (n=12) and "non cycloid" (n=68) patients were compared according to the diagnostic stability.

**Results:** The nosological reevaluation performed after 3 years (according to the diagnostic criteria of DSM-IV) showed that the number of patients who had changed the diagnosis had not differed statistically in neither group, ( $p = 1.000$ ). However, the type of diagnosis which both groups evolved to, was statistically different ( $p < 0.001$ ). Being that 16.7% of the "cycloid" had evolved to a bipolar disorder while 9% to schizophrenia. While in the "non-cycloid" group no bipolar disorder was found, consisting the group of 50% diagnosed with schizophrenia and the remaining 50% of schizophreniform disorder.

**Conclusions:** The detection of possible cases of cycloid psychosis during the first psychotic episodes, could largely predict the possibility of ultimately developing what would be classified according to the current (DSM-5) nosological systems as a bipolar disorder.

## **DSM-5 TOBACCO USE DISORDER CRITERIA PROFILES IN A REPRESENTATIVE SAMPLE OF THE LARGEST METROPOLITAN AREA IN SOUTH AMERICA**

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**BACKGROUND AND AIMS:** Given the development of a new diagnostic classification(DSM-5) for tobacco use disorders(TUD), we aimed to identify continuous and categorical phenotypes among individuals who had at least 1 cigarette per week during lifetime. Most of the conceptual framework for TUD come only from alcohol use disorder(AUD) studies. Data came from São Paulo Megacity Mental Health Survey (SPMHS) collected between 2005-2007, which is part of World Mental Health Survey.

**METHODS:** Exploratory factor analysis(EFA) and latent class analysis(LCA) of the DSM-5 TUD symptoms - SPMHS did not include the 3 DSM-IV tobacco abuse questions - were performed using Mplus software taking into account complex survey design features. Socio-demographic correlates were examined via weighted logistic regression models.

**RESULTS:** As in DSM-5 AUD studies, a one-factor model reached the best fit in EFA, including very high loadings(>60%) of all eight symptoms tested. The best LCA model was a four-class model: a "non-symptomatic class" (31.1%), a "lost-control class" (27.3%) - defined by high probabilities of "use in larger amounts" and "unable to cut down" criteria, a "craving-tolerance class" (7.9%) and a "high-symptomatic class" (33.6%). Those in the "lost-control class" and "craving-tolerance class" were more than 2 times more likely to be young adults than those in the non-symptomatic class. Being in the three symptomatic classes was associated with unemployment/other as compared being in the non-symptomatic class.

**CONCLUSION:** Anti-craving medications and CBT, seem to be interesting treatment options for those in the "craving-tolerance class" and "lost-control class", respectively. Unemployed/young adults are the most important targets of TUD prevention/treatment in Brazil

## **WPA-0313 WHAT PARADIGM IS EMBODIED BY DSM-V AND ICD-11?**

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The direction of search for an adequate ICD assumes an answer for the question: what paradigm is embodied by DSM-IV-V and ICD-10-11 on the basis of comparative analysis of latest wordings of these classifications.

Desire of ICD-10 to be maximally natural classification and its atheoreticity being proclaimed in this connection is the most perspective direction of efforts. That is why innovation of DSM-V and ICD-11 should be considered from this point of view.

To observe atheoreticity is the most important at the first stage of collection of data. At the following stages theoreticity is inevitable.

The assertion that progressive innovation of DSM and ICD-11 is transfer from categorical to dimensional "paradigm" is followed by ignoring the fact that they are not contradictions, but indissoluble pairs of opposites which need combination. Declaring synthesis of these approaches resolute priority of data-based medicine before traditional clinical approach has been claimed. This false alternative returns us to positivist and neopositivist paradigms.

The actual alternative is opposition of phenomenological and inductive categories and methods, and the most urgent problem are ways of their composition in definite succession and in different complex combinations, but not mixing in process of integration and synthesis. Computer technologies allow analyzing data in accordance with various research programs and alternative approached, realizing principle of a complementarity and relying on monothetic but not only polythetic categorization.

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Topic

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# Disasters and Emergencies in Psychiatry

abstracts - volume 2

## **EARTHQUAKE IN CHILE: IMPACT AT SIX MONTHS AND TWO YEARS ON PATIENTS WITH SEVERE DEPRESSION IN TREATMENT IN A PUBLIC MENTAL HEALTH HOSPITAL DESTROYED ON FEBRUARY 27, 2010 IN CHILE.**

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**Objectives:** Determine the prevalence of PTSD and reveal the impact on the global clinical status, post-traumatic symptoms and post-traumatic growth, at six months and two years after Chile Earthquake on F-27, 2010

**Methods:** 75 women in treatment for severe depression were evaluated at first and six months post disaster. 56 of them were also evaluated at two years. According to the ICD-10, acute stress (ASD) and post-traumatic stress disorder (PTSD) were clinically determined in all three times. They also were evaluated with the Clinical Global Impression scale (CGI), the eight-item treatment-outcome post-traumatic stress disorder scale (TOP-8) and the Davidson scale. At two years, was applied the posttraumatic growth inventory (PTGi). Davidson scale (DTS) and PTGI had been validated in clinical Chilean population.

**Results:** AS: 58.7 %, PTSD 53.3% at six month 47, 4% at two years. The results on PTO 8 were (14.91; 14.45; 9.81) significantly only at two years ( $F=11.2$ ;  $p=0.0$ ). CGI improved (1.78; 2.6; 3.2) significantly at six month and at two years ( $p<0,01$ ). DTS significantly improved at two years (55.1 versus 43.4%  $p<0.01$ ). Considering PTGI: 43.4% of patients have a low growth, 17.1% have moderate growth, and 10.5% have a high growth. There is a direct relationship between the CGI and PTGI. ( $r=.707$ ;  $p=0.0$ ;  $R^2=.5$ ). 50% of the variation in CGI would be explained by PTI.

**Conclusions.** In this patients in treatment for severe depression, the prevalence of PTSD at six months and two years post -earthquake were elevated. The post-traumatic growth has proved to be an important improvement factor in this sample.

## **STUDY OF SUICIDE ATTEMPTERS CARRIED INTO THE EMERGENCY UNIT IN THE DISASTER AREA – COMPARISON OF BEFORE AND AFTER THE GREAT EAST JAPAN EARTHQUAKE –**

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**Objectives** We examined suicide attempters carried into one of the emergency unit (ER) before and after the Great East Japan Earthquake on March 11<sup>th</sup>, 2011, in an urban city with one million people, which is located at the center of the disaster area, to discuss the impact of earthquake disasters on suicidal behaviors.

**Methods** Suicide attempters who were carried into the ER after the earthquake disasters, between April, 2011 and February, 2012, were extracted as the "study group", and their medical records were studied retrospectively. For comparison, those before the earthquake disasters, between April, 2010 and February, 2011, were extracted as the "control group". In addition, the patients in the study group were divided into two groups, those who mentioned suicide reasons associated with the earthquake disasters were belonged to group A, and all others to group B.

**Results** The number of suicide attempters increased after the earthquake disasters. Suicide methods using bladed instruments increased. Among the causes and motives for the suicide attempts, those related to "family problems" have increased, but "psychiatric symptoms" have decreased. Cases with a psychiatric diagnosis of F7 (ICD-10) decreased. In the group A (with factors associated with the earthquake disasters), among the causes and motives for suicide attempts, family problems, psychiatric symptoms, as well as financial issues were found in large number statistically.

**Conclusions** In this ER, suicide attempters were increased after the earthquake disasters, and those with factors associated with the earthquake disasters had more complex problems.

## **RAPIDEZ DE RESPUESTA DE LAS BENZODIACEPINAS EN PACIENTES CON AGITACION ANSIOSA EN EL SERVICIO DE ATENCION PSIQUIATRICA CONTINUA DEL INPRF.**

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### **Objetivo**

Comparar rapidez de respuesta del clonazepam oral y del alprazolam oral y sublingual en pacientes mexicanos que presentan agitación ansiosa.

### **Metodos**

Se incluyeron pacientes Mexicanos de ambos sexos, de 18 a 60 años que al momento de la llegada al servicio presentaron agitación ansiosa y que requirieron prescripción de una benzodiacepina.

### **Resultados**

Se analizó una muestra de 44 pacientes. 90.91% del género femenino edad promedio  $43.86 \pm 11.2$ . Los medicamentos administrados fueron alprazolam presentaciones oral (VO) y sublingual (SL) y clonazepam oral; a dosis de 0.5 mgs, se integraron 3 grupos. Formados por 13 integrantes los del alprazolam VO y SL, 29.54% y 18 el de clonazepam, 49.91%. El diagnóstico principal fue predominantemente un trastorno depresivo mayor 38.64%. Se aplicó la escala de ansiedad de Hamilton (HAMA) y escala análogo visual (EAV) a los 0, 15 y 60 minutos encontrando diferencias en los diferentes grupos.

### **Conclusiones.**

En la EAV se evaluaron síntomas de desesperación, ansiedad y tristeza; encontrándose diferencias significativas en resultados de EAV de tristeza, sintiéndose menos tristes los pacientes que recibieron alprazolam en sus dos presentaciones ( $r=0.846$ ,  $p=0.029$ ). Se encontraron diferencias significativas en medición de ciertos ítems del HAMA. Se realizó prueba de X<sup>2</sup> a 15 y 60 minutos, obteniendo a los 15 minutos  $X^2 = 5.88$  con 3 grados de libertad y  $p=0.10$ ; y a los 60 minutos  $X^2 = 2.38$  con 3gl y  $p=0.5$ . Pese a la creencia de que el alprazolam SL tendría mayor rapidez de respuesta, fue el medicamento que respondió con menor rapidez y que mostró menor eficacia en la disminución de sintomatología ansiosa.

## **STRESS EVALUATION USING VOICE EMOTION RECOGNITION TECHNOLOGY: A NOVEL STRESS EVALUATION TECHNOLOGY FOR DISASTER RESPONDERS**

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**Objectives:** For disaster responders who work in a high stress environment, mental health support and stress management is an important issue. Self-administered questionnaire is used to screen for stress in general. However, questionnaire is not able to be excluded reporting bias, which means that registrant changes the nuance of answers consciously. Additionally, when screening a large number of subjects in the field of disaster, inspection simple and rapid method is needed. Recently, the technology of emotion recognition has been developed rapidly and highly. Therefore, in order to overcome them, we have developed a software stress evaluation using speech emotion recognition technology.

**Methods:** The subject is 1004 soldiers dispatched to the Great East Japan Earthquake and 444 soldiers to do a routine mission in Japan Ground Self Defense Forces. All of them had taken the stress analysis by voice and psychological testing by questionnaire. The evaluation by interviewing was carried out for 225 soldiers who showed an abnormal psychological testing, and obtained the consent.

We used “Sensibility technology ST Emotion” (AGI Japan Inc.) for emotion voice analysis system. This system determines emotional elements as including anger, joy, sorrow, and calmness. It also measures feeling of excitement and mood of depression. To evaluate the performance of the program, we compared with the psychological test (GHQ-30) or interviews.

**Results:** 29 soldiers in 225 were diagnosed to need medical intervention or counseling. GHQ-30 detected 27 of them and its sensitivity was 0.931. Voice analysis detected 26 of them and its sensitivity was 0.897.

**Conclusions:** The sensitivity of stress evaluation by voice was similar to that of the GHQ-30. Additionally, the reporting bias was not observed in it.

## **MENTAL DISORDERS OF EVACUEES OF FUKUSHIMA DAIICHI NUCLEAR POWER PLANT ACCIDENT**

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After the Great East Japan Earthquake that occurred on March 11, 2011, and the subsequent Fukushima Daiichi Nuclear Power Plant(NPP) accident, the public office of Okuma-village where the Fukushima Daiichi NPP is located moved to Aizuwakamatsu which is about 100 km from there. Most of the residents have also evacuated to Aizuwakamatsu. They can't return home because Okuma-village is one of the most exposed areas. Now, about 2,260 evacuees are still forced to live in the narrow temporary housing.

On the morning following the disaster, the residents near Fukushima Daiichi NPP were forced to leave their village quickly without detailed information or a time frame of the evacuation. The public office also moved, but the information about their future lives and their home village is very limited. Their fatigue from their inconvenient lives and the irritation increased day by day.

The symptoms of the evacuees was the acute stress disorder resulted from the sudden change of their environments. They experienced anxieties over their life plans, anger, and irritability which they didn't know who to complain to.

It has been 3 years since the disaster. Now, their symptoms became chronic. Although the evacuees have some security in their lives at the present because of the compensation from Tokyo Electric Power Company(TEPCO) and the government, they have lost their social roles. The anger towards TEPCO and the government is beginning to change to abandonment and that feeling results in prolonged depression and apathy among the evacuees. Many of them are staying at home without communicating with others. In some cases they turn to pathological gambling or alcohol dependency instead of their social roles before March 11.

I will present some cases who are being treated still now, and the psychopathological consideration of the changes in their psychiatric symptoms.

## **PROTOCOL FOR URGENT PSYCHOLOGICAL ASSISTANCE TO VICTIMS OF ROBBERY**

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The protocol IPSEAPAT for urgent psychological assistance to victims of robberies is presented, the objectives are:

A) Perform basic psychological exploration by telephone to people who have suffered or robbery.

B ) To provide immediate telephone counseling, by the application of urgent psychological assistance strategies, to those who have suffered a robbery in order to increase their psychological resistance to the situation experienced and psychological adaptability, and to decrease the possibility of complications or adaptive psychological or psycho- dysfunctional or other difficulties , secondary to the traumatic event .

### **Method**

The procedure to be performed is :

1. Immediate call from the Psychologist to the user .
2. Perform the first assistance of the person .
3. Ask and find general information about the situation experienced by the person.
4. Psychological Exploration and also of psychological symptoms and reactions of the person.

Rate – on site assistance . \*\*\* Should consider whether :

1. The symptoms are very intense or circumstances indicate high level of psychological trouble at the time
- 2 . If there was any customer or worker who died or was seriously injured during the robbery .

Consider consultation assistance , if there are other prior factors that can interfere with the normal recovery from the situation , and if the person is not receiving counselling from other professional psychologist ..

5. Facilitate self-care strategies and also for coping situations and symptoms, and to assess responsiveness , adaptation and evolution.
6. If persistence and / or worsening of symptoms , consider onsite assistance.

### **Conclusions**

We consider this protocol highly useful based on the preliminary results that we have, and hope we could show more in-depth results directly during the XVI Congress.

## THE INFLUENCE OF THE GREAT EAST JAPAN EARTHQUAKE IN MARCH 11 2011 TO INFANTS

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### Objectives

The Great East Japan Earthquake and following tsunami, fire, and nuclear power plant explosion induced traumatic experiences, such as fear of death due to the earthquake, severe housing conditions, and loss of family or friends. The aim of this study is to investigate the prevalence of posttraumatic stress disorder (PTSD) and its association with each traumatic experience among 5–8-year-old children two years after the Great East Japan Earthquake.

### Methods

Children aged 5–8 years who were in selected preschool classes on March 11, 2011, in three prefectures affected by the Earthquake, and one prefecture that was unaffected participated in the study (N = 280). PTSD symptoms were assessed through questionnaires completed by caregivers and interviews by psychiatrists or psychologists conducted between September 2012 and May 2013 (i.e., 1.5–2 years after the earthquake). Severe traumatic experiences were assessed through the interview, and housing condition was assessed by a questionnaire. Multivariable Poisson regression using a stepwise backward model was used to test the independent associations between PTSD symptoms and exposure to each traumatic experience. The association between PTSD symptoms and the number of traumatic experiences was also assessed.

### Results

Among children who experienced the Great Earthquake, 33.8% exhibited PTSD symptoms. Of the different traumatic experiences, experiencing the earthquake and the loss of distant relatives or friends were independently associated with PTSD symptoms (prevalence ratios: 6.88 (95% confidence interval (CI): 2.06–23.0) and 2.48 (95% CI: 1.21–5.08), respectively). Furthermore, there was a significant linear association between the number of traumatic experiences and the prevalence of PTSD symptoms ( $p$  for trend < 0.001).

### Conclusions

Around one in three young children in the communities sampled exhibited PTSD symptoms, even two years after the Great East Japan Earthquake. Children who experienced the earthquake and lost distant relatives or friends showed a significantly higher prevalence of PTSD symptoms. A dose-response association between the number of traumatic experiences and PTSD symptoms was confirmed. These data may be useful for preventing PTSD symptoms after natural disasters and suggest the importance of providing appropriate mental health services for children.



## **LONG-TERM MENTAL HEALTH OUTCOMES FOLLOWING THE 2004 ASIAN TSUNAMI DISASTER: A COMPARATIVE STUDY ON DIRECT AND INDIRECT EXPOSURE**

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**Objectives:** There is inadequate information on the long-term mental health outcomes among disaster victims in low and middle income countries. It is especially so for the vast majority of victims who are indirectly exposed to disasters. To address this gap in knowledge we examined the prevalence of psychiatric morbidity, particularly anxiety, depression and post-traumatic stress disorder (PTSD) in the 2004 Asian tsunami victims in India, 4.5 years after the disaster. It was also intended to compare the mental health outcomes of the victims with direct exposure to tsunami waters and those who were indirectly exposed to tsunami disaster (people living near the sea who escaped tsunami waters but witnessed the disaster and suffered various losses).

**Methods:** In a cross-sectional epidemiological study, 666 randomly selected victims in South India were assessed for psychiatric morbidity through the Self-Reporting questionnaire (SRQ), Zung Self-Rating Depression Scale, Zung Self-Rating Anxiety Scale, Self-Rating Scale for PTSD (SRS-PTSD) and suicidality screening. The disaster experience, quality of life and socio-demographic profile were also assessed.

**Results:** Psychiatric morbidity based on SRQ was 77.6% and estimated prevalence of anxiety symptoms (23.1%), depression (33.6%), PTSD (70.9%) and comorbidity (44.7%) suggested nature and extent of the psychiatric morbidity in the tsunami victims. The direct exposure group had a significantly greater proportion of psychiatric morbidity based on SRQ, anxiety symptoms and suicide attempts. Factors which predicted psychiatric morbidity were: lack of formal education, perception of disaster as highly stressful, damage to home and loss of livelihood and livestock.

**Conclusions:** In conclusion, a large proportion of Asian tsunami victims were observed to have continuing mental health problems 4.5 years after the disaster, which highlighted the need for psychiatric services for the affected communities.

## **WPA-0146 POSTTRAUMATIC STRESS DISORDER: GLOBALIZATION OF THE PROBLEM**

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The problem of trauma and posttraumatic stress disorder is an urgent problem of world psychiatry as:

1. Development of civilization leads to global disasters, while people being helpless and powerless against natural disasters.
2. The problem is of paramount practical importance, considering unceasing spreading of traumatic disorders among the population
3. The absence of precise theoretical concepts defines the approaches for investigation of psychological and biological mechanisms for the development of PTSD, and the variety of pathogenetic models of development, such as biological, psychodynamic, cognitive and psychosocial models.
4. Consecutive natural and technogenic disasters, non-trivial «sociogenic» events, accompanied by deep emotional experience, as well as changes in the ecological situation have lead to multifactoriality, polygeny and multiformity of PTSD, investigation and systematization of which have become imperative of time.

This study is analyzed the impact of natural, economical, moral-psychological factors on socio-political development of Armenian society, particular, on mental and somatic health.

The situation in the country, examined as multifactorial polygenic long term post stress, causes the following responses: somatic and mental incidence rate, demoralization of society, asocialization, depopulation, degradation. Genesis and contents of post stress disorders is analyzed. According to the researches battery of PTS in Armenia is divided into three not equal groups: posttraumatic stress disorders (and post stress disorders) among earthquake victims, ex\*combatants and refugees. Certain nozologic and ontological aspects of PTSD are discussed. It is indicated that PTSD issue requires integrative approach to (due to conception incompleteness) both clinical-diagnostic and social-prophylactic pathways.



Topic

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# Dissociative, Somatization and Factitious Disorders

abstracts - volume 2

## MULTIPLE BODY CONCERNS AND PSYCHOPATHOLOGY

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### Objectives

It is believed that up to 70% of adolescents are unhappy with two or more parts of their body. This means psychopathologic risk, especially if there are depressive symptoms, autofocus, and concern about external appearance. Less attention has been directed to late adolescence and early adulthood.

We assess cognitive and emotional variables to differentiate participants with and without multiple body concerns. It predicted that people with multiple body concerns have more rumination, higher level of public and private self-consciousness, higher self-references, negative affectivity, and social inhibition.

### Methods

331 students (81.9% female), average of 21.52 years (SD, 3.20) and middle class (SCI, 40.82, SD 21.18). Participants were divided into two groups: with no body concerns (BDDE) (n = 35), and with at least three problematic body areas (n = 85). There were no sex differences (Chi = 1.38, p = .239), or social class ( $t_{118} = 0.74$ , p = .458), but with age differences ( $t_{118} = 2.55$ , p = .014).

### Results

We observed negative outputs in participants with body concerns: higher private ( $t_{118} = -2.24$ , p = 0.027) and public self-consciousness ( $t_{118} = -2.88$ , p = .005), rumination ( $t_{118} = -3.30$ , p = .001), negative affect ( $t_{118} = -3.25$ , p = .001), self-references ( $t_{118} = -4.20$ , p = .000), indicating psychopathological risk (mean 6.14 vs. 2.46), but no differences in social inhibition ( $t_{118} = -1.32$ , p = .186).

### Conclusions

Students with multiple bodily concerns are in psychopathological risk, especially younger ones.

## **DISSOCIATIVE SYMPTOMS REPORTED AT PRETREATMENT AS PREDICTORS OF NEUROTIC DISORDERS INTENSIVE PSYCHOTHERAPY EFFECTIVENESS**

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**Objectives:** To estimate predictive value of dissociative symptoms in the context of neurotic disorders psychotherapy effectiveness

**Methods:** Psychotherapy results of a day hospital intensive treatment were assessed with personality inventories and symptom checklist. Pre- versus post-therapy outcome evaluation was performed with reliable change index as well as clinically significant index. Pretherapy reported dissociative symptoms scores were associated with posttherapy results.

**Results:** Different symptom improvement and personality improvement measures are differently connected with various symptoms analyzed as well as with dissociative scales total scores. Among several dissociative symptoms reported in symptom checklist at pretreatment, several seem to be associated with significantly higher risk of unfavorable psychotherapy result (i.e. 'symptom-domain not-cured'): problems with concentration (OR=2.73 95% CI 1.44-5.17), memory problems (OR=2.15 95% CI 1.46-3.16), absent-mindedness (OR=2.08 CI 1.27-3.38). Other unfavorable results category appears to be also significantly associated with same set of complaints, however with lower risk ratios (respectively: OR=1.77 95%CI 1.05-2.90; OR=1.57 95%CI 1.12-2.19; OR=1.90 95%CI 1.26-2.88).

**Conclusion:** There are associations between dissociative symptoms reported at pretherapy and intensive psychotherapy outcome. Symptoms identified as most significantly associated with unfavorable therapy results seem to be dissociative memory and attention problems.

## DO DISSOCIATIVE SYMPTOMS APPEAR FURTHER IN THE CLINICAL POPULATIONS THAN IN GENERAL POPULATION?

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**Background:** Dissociative symptoms are a group of psychiatric syndromes characterized by disturbance in some aspects of consciousness, identity, memory, motor behavior. Most studies have found a relationship between dissociative disorders and the experience of psychological trauma. But are more common in these cases, or appear in other psychiatric disorders or the rest of the population?. Do they influence the demographic variables in the onset of these symptoms?

**Objectives:** Studying the difference in appearance of dissociative symptoms among the population attending Mental Health and is diagnosed with a mental disorder and people without this.

**Methods:** The sample consisted of 30 subjects attending outpatient mental health, diagnosed with different disorders. The results of this sample were compared with the results of the control group, which consisted of subjects who did not attend any kind of psychological or psychiatric treatment.

All participants completed the Dissociative Experiences Scale(DES). Is a 28-item self-report questionnaire with scores ranging from 0-100. Scores above 20 or more, above 30 suggest pathological dissociation. The DES demonstrated good internal consistency. We included the Somatoform Dissociation Questionnaire (SDQ-20). Is a shortened version of a 20-item questionnaire that assesses somatic symptoms associated with dissociation such as motoric inhibition, intermittent pain symptoms, and anesthesia. A score greater than 7 discriminates dissociative from other disorders (demonstrated modest internal consistency).

**Results-Conclusions:** It was found that no subjects in the control group exceeded the cutoff questionnaires indicated for both, resulting in the score in the middle of the cases of the sample reflects the appearance of dissociative symptoms. Furthermore, in relation to the results of the sample of patients studied, comparing differences reflect demographic variables (gender, age, educational level).

## **APPROACHING A DISSOCIATION**

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### **Objectives:**

The study of dissociative disorders has varied greatly over time.

Dissociative disorders are to characterize first, because all the normal integration of emotion, sensation, movement, and / or thinking is impaired, secondly, the absence of physical pathology to explain the symptoms, and moreover, the relationship with psychosocial stressors clear.

A study in the USMC -Huelva about the presence of dissociative symptomatology in a sample of 30 patients with different clinical pictures presented in this paper.

### **Methods:**

The procedure was carried out the administration of the Dissociative Experiences Scale Cambridge (DES), clinical interview and information gathering through history.

The sample consists of 30 patients in the outpatient follow -Huelva USMC, aged between 16 to 67 years and 8 were men and 22 women.

### **Results:**

One third of the patients had clinically significant scores with respect to dissociative symptoms. Of the ten patients with scores revealing the presence of this clinic, only one of them was diagnosed with a dissociative box. The remaining patients had different diagnoses (most adjustment disorders) and despite the presence and severity of dissociative symptoms are not diagnosed or comorbid way.

### **Conclusions:**

Dissociative disorders are often underdiagnosed, which affects the care and treatment that is done to them.

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## ¿DE LA DISOCIACIÓN A LA DEMENCIA?

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**OBJETIVO:** Paciente de 67 años sin antecedentes psiquiátricos hasta diciembre del pasado año (2013). Desde entonces dos ingresos, uno en dicho mes, y otro, en enero 2014, de 41 días de duración.

El paciente es traído a Urgencias por familiares por alteración de la conducta, desorientado y con elevada ansiedad física. Primer ingreso, al alta con diagnóstico de Tr. Depresivo con importante ansiedad asociada. Pasados 24 días, el paciente vuelve a ser traído a Urgencias por los servicios sanitarios por alteración conductual, lo encuentran desorientado en la calle y los agentes de policía se ven obligados a reducirlo.

### MÉTODO:

-Historia clínica con antecedentes somáticos y psiquiátricos, hábitos tóxicos, situación basal, enfermedad actual y exploración psicopatológica.

-Interconsulta a Neurología

- Bioquímica general, hemograma, coagulación, hormonas tiroideas, serología (VHC, VHB, VIH y lúes), sistemático de orina y citometría y batería de tóxicos en orina. Se solicita TAC, RM craneal, EEG, Inmunología, estudio de LCR y SPECT.

**RESULTADOS:** Su evolución en planta se caracteriza por conductas erráticas, pararespuestas, actitudes muy regresivas, manipulativas (se tira al suelo, se golpea con la pared...). Se muestra incapaz de deambular. No controla la micción. Evita la interacción con el explorador. El origen del cuadro disociativo parece residir en un conflicto que afecta a su ámbito familiar. Tras la confrontación empeora notablemente, se niega a comer durante 4 días con un importante deterioro físico, siendo necesario poner SNG.

En cuanto a las exploraciones realizadas, SPECT hipoperfusión temporoparietal izquierda con patrón gammagráfico sugestivo de encefalopatía de pequeño vaso. EEG, leve trastorno inespecífico de estructuras profundas.

Al alta, el paciente continúa con importante inhibición, sintomatología cognitiva probablemente secundaria al conflicto afectivo-similar, no simulado y al cuadro depresivo reactivo. Desde neurología se deriva para valoración en la Unidad de Demencias.

**CONCLUSIONES:** A pesar de la resolución del conflicto persiste sintomatología cognitiva que no permite descartar el diagnóstico de demencia.



## **PHOBIC POSTURAL VERTIGO - A SUBJECTIVE DISORDER OF BALANCE**

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**Objectives:** Vertigo is very prevalent in our clinical practice, its unspecified and the fact of being present in different pathologies often generates insecurity and frustration in physicians and patients. Brand and Dietrich were the first to describe Phobic Postural Vertigo (PPV), a somatoform disorder, manifested by non-rotational vertigo and unsteadiness while standing and walking with superimposed episodes of short perceptions of body perturbations. The objective of this work is to describe the clinical characteristics, treatment approaches as well as the main differential diagnoses of PPV.

**Methods:** It was made a literature review on the topic “Phobic Postural Vertigo”.

**Results:** Description of Phobic Postural Vertigo based on literature review.

**Conclusions:** PPV is linked to psychiatric disorders such as depression, obsessive-compulsive-type personality, labile affect and depression. Despite the high prevalence, Phobic Postural Vertigo is misdiagnosed. Therefore one must attempt to recognize it, since its appropriate treatment prevents recurrence and incapacitation.

## **PSYCHOGENIC AND SIMULATED MOVEMENT DISORDERS IN PSYCHIATRIC EMERGENCY**

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**Objectives :** Movement disorders are a frequent finding in psychiatric practice <sup>(1)</sup>, even in psychiatry emergency (PE). Studies on psychogenic movement disorders in PE are scarce. We aim to determine characteristic features of patients presenting with acute psychogenic or simulated movement disorders in PE.

**Methods :** A retrospective study was conducted from October 2012 to September 2013 and included all patients with acute psychogenic (PMD) or simulated movement disorders (SMD) seen in PE.

**Results:** Thirty-eight patients presented with PMD or SMD in psychiatric emergency (11.34% of all movement disorders; sex-ratio: 3.75; mean age of 32.3 years). Both the 24 patients who had SMD (sex-ratio: 23; mean age of 35.2 years) and the 14 patients who presented PMD (sex-ratio: 1; mean age of 27.5 years) developed mainly tremor or choreiform movement disorders. 16% of patients with SMD, with patent anti-social personality, explicitly claimed anticholinergics. The most used drugs in emergency in patients with SMD were benzodiazepines (57%) and neuroleptics (10%), and 35% had placebo injections. Half of patients with PMD received benzodiazepines.

**Conclusions :** psychogenic and simulated movement disorders are relatively frequent (>10% ) movement disorders in PE. The predominance of young male adults in SMD group may be explained by the prevalence of males in psychopathic personality disorder and addiction disorders. In PMD, the high prevalence of younger age and females are known to be risk factors for conversions. It is necessary to distinguish authentic movement disorders from psychogenic ones and simulations to avoid abusive medication.

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## **CARDIOPATHIA FANTASTICA: WATCH OUT WHEN DECEPTION INVOLVES HEART**

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Cardiac Variant of Munchausen also known as Cardiopathia Fantastica has been reported few times in literature. Knowledge of its existence would be not only beneficial of patient's workup regarding his/her complaint, but also would be economical to hospital by reducing unnecessary medical tests as well as procedures. Herein, we report a case of cardiopathia fantastica initially presented as social admission to Veterans' Affairs hospital due to lack of housing leading to extensive cardiac workup including coronary angiography due to his deceiving cardiac complaints. 56 y/o Caucasian male, single, with h/o hypertension was admitted to Veterans' Affairs hospital as social admission due to lack of housing. He remained asymptomatic during initial days. After few days in hospital, patient complaint of severe chest pain 8-9 out of 10, precordial location associated with difficulty breathing and uneasiness. Patient underwent EKG and troponin levels to rule out acute cardiac event. It turned out patient had slight elevation of troponin and decision was made to transfer patient for angiography for further evaluation that eventually was found normal. On reviewing past records, it came to our attention that patient has undergone multiple angiographies in past for similar complaints at various hospitals. Patient had also received pacemaker for unreported reason. This case projects a light on futile nature of such situation. Considering cardiac symptoms, complaints by patients would be detrimental if ignored or overlooked. At the same time, going overboard with numerous tests and procedures to rule out cardiac cause can be expensive, overwhelming and possibly positive reinforcement for the patient exhibiting such complaint. An understanding attitude towards such patients is particularly difficult because their entire problem is so bizarre. Feeling of resentment and an unmasking ceremony that sets the patient up, as an adversary should be avoided. Patient could benefit from long-term psychotherapy.

## UNA CONVERSIÓN IATROGÉNICA: A PROPÓSITO DE UN CASO

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### INTRODUCCION Y OBJETIVO:

Paciente de 52 años que ingresa en medicina interna por dolor cervical. que irradia a toda la región vertebral desde hace unos días que no mejora con su medicación habitual.. La exploración física no corresponde a ningún cuadro orgánico. Ha tenido múltiples ingresos por clinica reumatologica indiferenciada, sin correlación con el malestar de la paciente. Nos consultan para establecer el diagnostico diferencial entre un trastorno conversivo, facticio o simulación.

### MATERIAL Y METODOS

Antecedentes somáticos: intolerancia a múltiples fármacos. Diagnosticada de enfermedad sistémica del tejido conectivo indiferenciada; discopatía degenerativa C4-C5 y C5-C6 con leve estenosis del canal..

Antecedentes psiquiátricos: seguimiento en CSM desde hace 10 años con diagnostico de distimia y trastorno de personalidad de tipo conversivo.

Exploración psicopatológica: CyO en tres esferas. No tiene conciencia de conflicto.

Entretimiento psicomotor. Hipofonia funcional de 2 años de evolución de tipo conversivo. Animo bajo, no endógeno. Apatia. Anergia. Locus de control externo.

Insomnio mixto Importante irritabilidad con sus familiares

Exploraciones complementarias: TAC y RMN no congruentes con la significación clínica.

### RESULTADOS

El diagnóstico fue de trastorno conversivo (F44)

### CONCLUSIONES

El interés de este caso clínico radica en las dificultades diagnósticas y terapéuticas. El diagnóstico diferencial de los trastornos psicogénicos incluye trastorno somatomorfo, la enfermedad facticia, la simulación, la depresión, los trastornos de ansiedad y menos frecuentemente el trastorno de personalidad histriónica. En los trastornos somatomorfos, los síntomas son producidos en forma no consciente y están asociados a factores psicológicos; dentro de ellos se engloba el trastorno conversivo de la paciente, que ha recibido múltiples tratamientos invasivos, que a posteriori se han considerados iatrogénicos. Descartaríamos trastorno facticio, pues estos pacientes son plenamente conscientes de que están fingiendo enfermedad. No sería una simulación ya que no se provoca deliberadamente los síntomas aunque si obtendría la ganancia secundaria que le produce el rol de enferma.

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## PSYCHOTHERAPEUTIC TREATMENT OF A HYPOCHONDRIAC DISORDER

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**Objectives:** Hypochondria is defined as "worry and fear of having a disease after the personal interpretation of somatic symptoms". We intend to illustrate that an appropriate formulation and psychotherapeutic intervention can achieve positive results. For this we will propose a clinical case.

**Methods:** Luis (14 years old), derived from his primary care doctor, has a high level of anxiety about the possibility of developing stomach cancer. He has many gastrointestinal symptoms (diarrhea, stomach pains, flatulences...) are interpreted as symptoms of false disease. After personal and family assessment, it carried out an individual intervention (paradoxical: ritualize exploration) and a family intervention (structural: reinforcement parental system, improvement the relationship of the spouses).

**Results.** After ten sessions the worries, anxiety and discomfort disappeared completely.

**Conclusions.** At present, the pessimism about the treatments applied to hypochondria, is not justified, studies demonstrate effective interventions. It's important that it will not be applied in a standardized way, but on the basis of the assessment, clinical formulation and considering the vicissitudes of the therapeutic process. It is also important to consider the global context of the person, especially the family.

## **SYMPTOMS OF DISSOCIATION IN THE PERINATAL PERIOD. IMPLICATIONS FOR TREATMENT AND THE MOTHER-INFANT RELATIONSHIP**

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### **OBJECTIVES**

To evaluate the presence and nature of dissociative symptoms in a large sample of women in the perinatal stage referred for psychiatric evaluation. Identify the most common symptoms and evaluate their implication for treatment and to intervene in the mother-infant relationship.

### **METHODS**

Of a total of 300 consecutive patients, symptom patterns and developmental history were evaluated to identify the presence of dissociative symptoms. The most prominent symptoms were used to design specific intervention strategies and to monitor the impact on the mother-infant relationship

### **RESULTS**

75 women(25%) had prominent symptoms of dissociation, most had also PTSD, mood dysregulation, and a personality disorder. A majority also antecedents of alcohol and drug abuse. The most common dissociative symptoms were: living in a fog, problems focusing, feeling constantly overwhelmed, having free floating anxiety, memory problems, fugue states, depersonalization and de-realization. These can lead to abnormal maternal behaviors such as unresponsiveness, rejection and contradictory behaviors toward the baby, often leading to a disorganized attachment pattern in the infant. However, many traumatized women did not have dissociative symptoms, opening the question as to causal mechanisms for dissociation.

### **CONCLUSIONS**

Most of the patients had antecedents of abuse and neglect, and were very mistrustful of treaters. They often had an erratic pattern of attendance to sessions and great ambivalence toward treatment. Many had a “phobia of attachment” to the therapist and tended to sabotage treatment. Specific multimodal approaches, mentalization based psychotherapy and a high degree of flexibility are necessary to reach such patients. Medications play a minimal part in their overall therapeutic approach.

## **ALEXITHYMIA AND EMOTION REGULATION STRATEGIES IN PATIENTS WITH SOMATIZATION, ANXIETY DISORDERS, AND NORMAL INDIVIDUALS: A COMPARATIVE STUDY**

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**Objectives:** Deficiency in emotion regulation is considered as fundamental problem among people suffering from somatization and anxiety disorders. Difficulty in identifying and describing feelings that is termed alexithymia is the main determinant of affective dysregulation. Pathologies of identifying and describing feelings could influence the way people use cognitive emotion regulation strategies. Can patients with somatization and anxiety disorders be distinguished from normal individuals in terms of the amount of maladaptive emotion regulation strategies they use? To answer this question, the main aim of this study was to compare alexithymia and emotion regulation strategies among patients with somatization, anxiety disorders and normal individuals.

**Methods:** A total of 90 participants (30 patients with somatization, 30 patients with anxiety, 30 normal individuals) answered to Cognitive Emotion Regulation Questionnaire (CERQ; Garnefski & Kraaij, 2006) and Toronto Alexithymia Scale (TAS-20; Bagby, Taylor, & Parker, 1994). The normal group also answered Depression Anxiety Stress Scale (DASS; Lovibond & Lovibond, 1995).

**Results:** The results showed that the study groups were significantly different in emotion regulation strategies as well as alexithymia. Adaptive and maladaptive emotion regulation strategies showed significant negative and positive correlations with alexithymia, respectively.

**Conclusions:** Based on the results of the present study, it can be concluded that alexithymia is a kind of deficiency in processing and regulation of emotions that determines the way people use adaptive or maladaptive cognitive emotion regulation strategies.

**Keywords:** alexithymia, cognitive emotion regulation, somatization disorder, anxiety disorder

## CONVERSION DISORDER... WHAT LIES BENEATH?

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### Objectives

Herein is reported a case of a man with Delusional Disorder (DD) presented as a Conversion Disorder (CD).

### Methods

Case report description based on online PubMed database and suitable literature.

### Results

A 29 year old man was referenced to Psychiatric observation due to bilateral psychogenic complete ptosis with blepharospasm, with two months of evolution, after being observed by Ophthalmology and Neurology without identification of organic causes. At that time no psychiatric symptoms were present and CD was suspected. According to information given by his sister a suspected persecutory delusion involving his former co-workers was identified, but he said that such a situation had happened a year ago and his mother confirmed. He began treatment with amitriptyline 25 mg/day and sulpiride 200 mg/day. Four months later the symptoms disappeared. Eventually it was discovered that during this period he had a paranoid persecutory delusion, believing to be constantly observed and heard, which led him to close his eyes intentionally after watching pornography online. He explained that if he couldn't see, then it couldn't be him using the computer.

### Conclusions

In the presence of a mental instability or disorder, somatic symptoms may arise, as a way of psychological defense, leading to a reduction in intrapsychic distress, as this symptoms draw attention to themselves blocking the real problem. When unexplained physical neurologic symptoms are observed, as in this case, CD is suspected.

The most common associated primary mental disorder in patients with CD is affective illness, usually major depression. In one study of 53 patients presenting with conversion symptoms, psychosis was also implicated in a minority of patients.

We concluded that this was a rare form of presentation of DD and a challenging case. Further investigation seems necessary in order to establish the actual epidemiology of CD and the primary psychiatric disorders associated.

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## **EFFECT OF MEDIA COVERAGE IN THE OUTCOME OF MASS HYSTERIA**

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### **Objectives**

Mass hysteria is a social phenomenon often occurring among otherwise healthy adolescents or preadolescents. Prominent emergency or media response often aggravates symptoms. The objective of this paper was to study the effect of media coverage in the outcome of mass hysteria.

### **Methods**

Two separate events of mass hysteria were included for the present study. Media coverage of both events in terms of content, frequency and prominence were studied. All affected children, their parents and teachers were interviewed to assess their symptoms, stressors, understanding and belief about the episodes. They were also given psycho education regarding the illness.

### **Results**

In the first event, which occurred in a relatively remote village 7 adolescent girls of a school were affected. All the affected children were sent back after single outpatient consultation. No recurrence of episodes occurred during the one month follow up period. There was no electronic media coverage, coverage in print media was restricted a small article in a local news paper.

The second event occurred close to the state capital. 11 adolescent girls of a government school were affected. It was covered in the electronic media within few hours of the event. All the major news papers of the state described it as a medical emergency. Coverage was continued for a week till the villagers banned the media. Symptoms continued to recur for 2 weeks. Three new cases were also reported during this period. One week after the stoppage of media coverage no recurrence of events were reported.

### **Conclusion**

Media has a powerful role to play in the outcome of mass hysteria. It can be a double edged sword. Proper scientific explanation can have a positive affect where as statements of medical emergency, witchcraft or the supernatural can have a negative impact on the physical, psychological and social wellbeing of the affected persons.

## **IMPORTANCE OF EARLY RECOGNITION OF CONVERSION DISORDER IN CHILDHOOD: A CASE REPORT**

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**Objective.** The aim of this paper is to report a case of conversion disorder in order to prevent excessive medicalization

**Methods.** Qualitative-descriptive. Report of case and literature review.

**Case presentation.** A girl of 12 years of age referred for a case of pseudosizures. There was a 2 months history of loss of speech, sudden-onset headache, musical hallucination and pseudoseizures episodes without loss of consciousness. The girl was treated as inpatient in the pediatric unit. Clinical, neurological and extensive laboratory test, imaging studies, EEG and cerebrospinal examination were carried out. No abnormalities were found. The initial diagnostic impressions were a Complex partial seizures and limbic encephalitis. She was treated with lorazepam, valproic acid, risperidone and corticosteroids. One month later, the symptoms persisted and pediatrician asked for psychiatrist evaluation. The evaluation revealed that pseudoseizures occur only in the waking state and in company of her mother. She had school problems and intrafamiliar conflicts. It was found some histrionic and dependent traits. Psychiatrist intervention include medication wash out, cognitive behavior therapy, increase her awareness of her emotions and how to express them and she was reinforced for the improvements. Her parents were educated in the psychosomatic nature of the symptoms, how to manage a pseudosizure episode and that secondary gain can reinforce symptoms. The girl was asymptomatic by the third week and reassumed her routine. Follow up for 5 months was performed and improvement was maintained.

**Conclusion.** Therapeutic success of the conversion disorder needs multidisciplinary approach. Early recognition of the disorder will limit unnecessary test and leads to an appropriate treatment, improve the prognosis and maintain the positive effects over time.

## CONVERSION DISORDER VS FACTITIOUS DISORDER VS MALINGERING: CASE REPORT

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### Introduction:

Conversion Disorder involves symptoms or deficits affecting voluntary motor or sensory function that suggest a neurologic or other general medical condition without an organic medical or neurologic cause. The symptoms are not intentional or under conscious control of the patient, contrary to Factitious Disorder where the patient deliberately falsifies symptoms for the sole purpose of assuming the sick role. Similarly, in Malingering we also observe intentional production of symptoms, but they are motivated by external incentives.

### Objectives:

To present a clinical case illustrative of some difficulties of differential diagnosis between Conversion Disorder, Factitious Disorder and Malingering.

### Methods:

Case report and literature review.

### Results:

We present a case of an inpatient 19-year-old girl who suddenly lost all motor function after knowing she would not be discharged the next day. She had a Glasgow Coma Scale score of 3, and remained in the same unresponsive state for 22 hours. We observed fully and spontaneous recovery when she received visits on the next day.

### Conclusions:

Conversion Disorder is theorized to be the result of psychological factors but its exact mechanism remains unknown. Sometimes its differential diagnosis to a real medical disorder can be problematic. *La belle indifférence*, a typical aspect associated to Conversion Disorder has now been described as more frequently associated to patients with organic disease. Factitious Disorder and Malingering can be simply described as feigning. The difference between them is the motivation behind it. They are distinguished from Conversion Disorder for their intention, which in some cases is never undisclosed.

## **COMORBIDITY BETWEEN CONVERSIVE AND DISSOCIATIVE SYMPTOMS: A CASE STUDY**

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### **Objectives**

To study the clinical profile of comorbid conversive and dissociative symptoms, and to analyse possible common psychogenic causes.

### **Methods**

This study consisted of a single case about a middle-aged woman hospitalized by a dissociative motor disorder comorbid with a multiple personality disorder. A literature review about this kind of comorbidity was additionally conducted to find common causes and its epidemiology.

### **Results**

Our patient showed a non-unusual form of comorbidity between physical and psychological symptoms with a dissociative cause, related with her difficulty to communicate with others in an assertive way. A combined treatment with psychodynamic and assertive psychotherapy, occupational therapy and pharmacological treatment (with dual antidepressive agents and long-life benzodiazepines) lead to a slow but a significant improvement from her symptoms, allowing the patient to return home and solve some of her interpersonal conflicts.

This kind of comorbidity, categorized at ICD-10 as a mixed dissociative disorder (F44.7), has been commonly reported in literature. This comorbidity is related in some studies with emotional communication problems.

### **Conclusions**

Comorbidity between conversive and dissociative symptoms is frequently reported in literature. However, fewer studies have been conducted on neither its common pathological pathways nor which specific treatment they may require. Further studies should determine whether there are nosological implications. An integrative approach with assertive psychotherapy and pharmacological treatment could be useful for this kind of patients.

## LIVING WITH CHRONIC LIE - MUNCHAUSEN SYNDROME CASE REPORT

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Munchausen's syndrome is a psychiatric disorder in which patients present with an intentionally produced or feigned illness with the aim to assume the sick role and to gain medical attention.

Sporadic case reports have been published over the years.

Early recognition can avoid unnecessary treatments and invasive diagnostic studies, with their inherent risk of complications.

**Objectives** Description of a rare and interesting clinical case that promotes discussion and contributes to the improvement of clinical practice.

**Methods** Clinical case report and review of the literature on the subject

**Results** A., a patient of 52 years with a history of prolonged hospitalization in 1987 (without no underlying organic cause known) began in January 2012, after the wreck of the cruise where he was working, a picture of anxiety, insomnia and headache.

In May of 2013 he started to resort to urgency complaining of uncontrolled hypertension and headache, but an organic disease was excluded.

In August of 2013 he was seen in Psychiatry urgency with complaints of insomnia, anxiety, active suicidal ideation with plan and in this context he has been hospitalized.

During hospitalization several inconsistencies were notorious in patient complaints.

He was discharged from the Psychiatric Unit after 10 weeks, with the most likely diagnosis of Factitious Disorder.

**Conclusions** No disease or physical or mental incapacity has been confirmed and A. presents various symptoms continuously, which leads us to suspect that, intentionally, he simulates the symptoms.

There seems no obvious advantage to this attitude than to obtain medical and nursing care, assuming the sick role, thus placing it Munchausen Syndrome as the most likely diagnosis.

No specific psychiatric therapy has proven to be effective in treating factitious disorders.

The most important factor in a successful approach is the early recognition of the disorder, avoiding unnecessary treatments, focused in the individual in his biopsychosocial perspective.

## PSEUDOLOGIA FANTASTICA?

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### Introduction

Pseudologia fantastica (PF) was first described in 1891 by Delbrueck. PF, mythomania and pathological lying terms are often used interchangeably. Dupré in 1909 described the cardinal symptoms of PF, however today there is no consensus on this definition, making FP a very complex term.

### Objectives

Review of PF, to know if PF should be recognized as a symptom or as an independent diagnostic entity. Reference and a brief description of a case report.

### Methods

Bibliographic review on PubMed using the terms " Pseudologia fantastica ", "Mythomania " and " Pathological lying".

### Results

There exist a few studies about PF and your prevalence is unknown. Majority of studies, described difficulty in definition and classification of this term. Some case reports tried to differentiate the symptom of a possible diagnostic, giving relevance to the characteristics of differential diagnoses.

In DSM, PF are no essential symptom of factitious disorder (FD), although some authors advocate the existence of PF in the absence of other criteria for diagnosis of FD or other psychiatric disturb. There is a description of primary and secondary PF (with psychiatric comorbidities). Motivations of liars seems to be crucial for the differential diagnosis, involving internal motivations (without benefits or unclear gains). Some imagiologic studies have attempted to demonstrate brain changes related to PF, including changes in the white matter of the prefrontal lobe.

### Conclusion

Don't exist a consensus about the control in the act of lying, which could bring some social and legal consequences. It's necessary more research to clarify the term and pathology, not only for better understanding of PF, but also as a guide to therapeutic intervention.

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## **DEPERSONALIZATION/DEREALIZATION: A REVIEW OF THE DISORDER AND ITS TREATMENT**

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### **Objectives**

Review and discuss the general aspects of the depersonalization/derealization disorder and its treatment.

Sensitize health care professionals for an accurate understanding of the symptoms of the disorder.

Highlight the changes in the diagnostic criteria between DSM-IV and DSM-5.

### **Methods**

A bibliographic review is made of the depersonalization/derealization disorder, based on the data published in PubMed.

### **Results**

Depersonalisation/derealization disorder involves an unpleasant and disabling alteration in the experience of self and environment and symptoms may also encompass alterations in bodily sensation. This disorder affects a significant number of psychiatric patients, but even among the general population the frequency of clinical symptoms of depersonalization is considerable. Some studies concluded that depersonalization/derealization disorder may affect 1-2% of the general population. Another survey found that it occurred in 80% of a sample of psychiatric inpatients. Its subjective nature and the ambiguity of the language used to describe the episodes lead to some psychopathologic challenges. The mean duration of symptoms was over 12 years at the time of first contact with a specialist depersonalization clinic. In spite of its high prevalence depersonalization has showed poor response to treatment and no definite medication treatment guidelines exist.

### **Conclusion**

There is evidence showing that the depersonalization/derealization disorder is considerably more common than previously thought. The condition is poorly understood, and clinicians should be aware of the challenge diagnosing its symptoms.

## **WPA-0258 OPPORTUNITIES TO DE-STIGMATIZE PATIENTS WITH EPILEPSY**

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People with epilepsy and their families are stigmatized and discriminated, what causes a higher level of psychological trauma than epileptic seizures themselves. The purpose of the research is the evaluation of destigmatizing psychotherapeutic program's influence to the patients with mental and behavioral disorders during epilepsy.

We examined patients with diagnoses F 06.4 - F 06.7, F 07.0 due to G.40.0 - G.40.06, with the duration of the disease less than 20 years.

Patients of the main group (I) in addition to standard medical therapy underwent a destigmatizing psychotherapeutic program. Patients of the control group (II) received medical therapy with anticonvulsant drugs.

Psychological research was conducted using reactive (RA) and personal anxiety's (PA) scale of Spielberger modified and adapted by Khanin.

Psychotherapeutic destigmatizing program included three consecutive blocks: the development of neuromuscular relaxation skill, the presence of secondary gain from self-stigmatization and the formation of positive behavior's model and self-care techniques and coping the epileptic distress.

It was set that moderately expressed RA in both groups before the psychotherapy and its reduction to the lowest level after therapy. High levels of PA in group I and II were revealed before the psychotherapy and the reduction of PA to moderate level in group I after the therapy. In group II positive dynamic was not revealed. The obtained results characterize a statistically significant reduction in levels of both RA and PA in group I ( $p < 0,05$ ), which confirms the effectiveness of psychotherapeutic destigmatizing program in patients with epilepsy.



## **WPA-0293 CHRONIC DISSOCIATIVE AMNESIA AFTER ANESTHESIA**

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**Background and aims:** Dissociative amnesia has causally been linked to psychological stress or trauma. However its onset often occurs on a background of psychological stress and mild physical insults. Herein we review two patients who developed dissociative retrograde amnesia after seemingly uncomplicated general anaesthesia for gynaecological and knee surgery, respectively.

**Methods:** Patients were investigated medically, neuropsychologically and neuroradiologically.

**Results:** Both patients (a 35- year old woman and a man in his early 20's) presented with lasting pronounced retrograde memory impairments, preponderantly in the episodic-autobiographical memory domain, with onset after awakening from objectively seemingly unproblematic anaesthesia and surgery. The first patient had amnesia for personal and public events, encompassing the last 13 years of life. The second case showed amnesia for personal episodes spanning the entire past life. Both patients performed within normal limits on standard anterograde memory tests. The first female patient additionally showed deficits on complex attention tasks and tests for executive functions and theory of mind, current mild depressive symptoms and past conversion symptoms. No patient had identity loss. A history of psychological stress preceding the onset of amnesia was elicited in both cases. Findings from standard structural imaging were unremarkable in both patients.

**Conclusions:** Although anaesthetics may interfere with mnemonic processing, the constellation of clinical symptoms (isolated retrograde amnesia), course, neuroimaging and anamnesis supported a diagnosis of dissociative amnesia in both patients. The biological mechanisms through which anaesthetics may interact with psychological stress and compound the risk for persistent retrograde amnesia are a topic of future research.

# **XVI WORLD CONGRESS OF PSYCHIATRY**

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Topic

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# Eating Disorders

abstracts - volume 2

## **MENTAL HEALTH ENGAGEMENT NETWORK (MHEN): USING SMART TECHNOLOGIES FOR MOOD MONITORING AND CRISIS PREVENTION**

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**Background:** We believe that smart phone technology with specific software for monitoring of mood is a qualitative addition to therapeutic options in psychiatry.

**Methods:** In this longitudinal, mixed method study, we recruited 400 participants, living in the community, with a mood or psychotic disorder who are currently working with mental health care professionals.

Each participant has been randomly assigned into Group 1 or 2. Group 1 participants received an iPhone 4S, a TELUS health space™ account, and a SMART record account (web-based application that provides individuals with a personal health record and tools to help them manage their health) in July, 2012. Participants in Group 2 initially acted as a control group and received the intervention in March, 2013.

**Results:** Web analytic reporting (Group 1) indicated that clients were frequently accessing the Lawson SMART record (9567 mobile and 3237 desktop homepage hits). We observed 5654 hits for clients accessing the health journal. 1728 hits were recorded for patients contacting their care providers, 1244 hits at provider portal. 971 hits for scheduling appointments and 462 hits for employing reminders.

**Conclusions:** Our study shows that patients have successfully used this technology based health care with effectiveness; particularly for contacting care providers. This has established sustained link between patients and mental health care system.

## **TRANSLATIONAL RESEARCH ON OBESITY AND EATING DISORDERS: DEFINING ENDOPHENOTYPES**

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A critical point to progress in the search of new therapies is that the disorders to be managed must be unequivocally defined from a diagnostic point of view. In the field of obesity and eating disorders, however, important confusion still exists. Thus, obese people tend to be considered a homogeneous population, but a high body mass index could only be a symptom common to quiet different disorders from an etiological point of view. An insufficient assumption of this concept could be responsible of many therapeutic failures and severe complications, i.e. “addiction transfer” from overeating to gambling or alcohol abuse after bariatric surgery in morbid obesity. The importance of a correct stratification of the patients based on precise definition of endophenotypes has been then raised by different authors, but perhaps poorly addressed up to the date. New strategies to face obesity and eating disorders are emerging from the idea that at least some forms of these diseases mainly involve central nervous system alterations (especially affecting brain reward pathways) which could be closely related to other pathologies such as drug addiction. If we bear in mind the diversity previously mentioned, this kind of interventions should be specifically applied and could be highly interesting whenever the patient behavior fits the “food addiction” proposed phenotype, which in turn requires a convincing set of biomarkers to become precisely defined. The BARIFIS project is one of the current initiatives aimed to identify and validate such potential biomarkers, in this particular case by studying morbid obese patients and their matched controls from different perspectives. An updated review of the findings supporting the importance of defining endophenotypes in this field of knowledge will be presented.

## **EATING DISORDERS, DISSOCIATION AND PHARMACOLOGICAL APPROACH**

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### **Objectives**

Eating Disorders (ED) are still being object of interest in terms of the complexity of its pathogenesis and treatment. Drugs can be used to treat those psychopathological aspects, which act as maintainers factors, such as anxiety, emotional dysregulation, impulsivity, or number of binges. The core psychopathology, such as body dissatisfaction, tends to be chronic and influence the prognosis. It is still necessary to develop both psychotherapeutical and pharmacological strategies focused on mediating factors of ED, which make that some of these patients do not respond to the current pharmacological strategies. The aim of this study was to assess which variables influenced the outcome of ED patients after one year of treatment. Specifically, we studied the influence of the dissociation, as one of the most difficult psychopathological variable to control, on the symptoms subsidiary of pharmacotherapy.

### **Methods**

We performed a longitudinal study in a cohort of 54 patients diagnosed of ED outpatients at the General Hospital of Ciudad Real. Different questionnaires of general psychopathology (BDI, STAI, CSR, DSE) and eating psychopathology (BSQ) were used at the beginning and after one year of treatment. Multiple regression analysis was used to assess the influence of the 'dissociation', measured with the DES scale, in the outcome of eating disorders, controlling general psychopathology variables which benefit from psychopharmacological treatment.

### **Results**

One year after treatment, there was observed that anxiety was a mediating factor of the effect of dissociation on other variables, such as body image. This is an important issue to work during the treatment of ED, because of it has an important influence in the outcome. This relationship remains stable throughout the follow-up with simultaneous improvement at the scores of both questionnaires after one year of treatment.

### **Conclusions.**

In patients with an ED, dissociation is a psychopathological variable to consider because it is related with psychopathological severity. Likewise, purging behavior is associated with higher levels of dissociation, and this is important to be applied in those patients in whom pharmacological treatment with fluoxetine (which is the one that has shown greater effectiveness) does not achieve a complete remission of symptoms.

The presence of dissociative mechanisms could explain the difficulty in responding to usual pharmacological strategies and suggests the need for further studies to test the effectiveness of the combined treatments (psychopharmacological and psychotherapeutic). Therefore, the evaluation of dissociative mechanisms in patients with an ED must be a regular procedure in those individuals that show higher psychopathological severity and worst clinical course. This finding must be taken into account when it is necessary doing a pharmacologic and psychotherapeutic al treatment to improve the effectiveness of both types of treatments

## **TEMPERAMENT, DISSOCIATION AND EATING DISORDERS**

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### **Objectives**

Dissociation has been related to emotional dysregulation and alimentary psychopathologies. This dissociation may interfere with the learning process, affecting the therapy negatively. Our aim in this study is to know if in Eating Disorders (ED), dissociation is closely linked to temperamental traits or also to character traits which are susceptible to be modulated during the therapeutic process.

### **Methods**

We studied 119 females that started an outpatient program for their ED. We used the Dissociative Experience Scale (DES), Temperament and Character Inventory (TCI), Eating Attitudes Test (EAT-40), and the State Trait Anxiety Inventory (STAI). We used multiple regression analysis.

### **Results**

Dissociation was associated with high scores on the EAT-40, even controlling the effect of anxiety traits, which also was related to dissociation. The temperament dimension “searching for novelty”, has been related in an opposite way to the DES. Also, the dimension of transcendence character and self determination influenced on the DES

### **Conclusions.**

This study confirms the importance of improving Self Determination levels at ED therapy, which influence on a lot of prognostic aspects, such as protecting from dissociation which is related to anxiety and alimentary psychopathology and can interfere with the therapeutic progress.

## **PREVALENCE AND COMORBIDITY OF EATING DISORDERS AMONG A COMMUNITY SAMPLE OF ADOLESCENTS: TWO-YEAR FOLLOW-UP**

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**Objective:** Comorbidity between eating disorders (ED) and other DSM-IV Axis I psychiatric disorders was analyzed in a community population of adolescents during two different periods. We expected to determine an association between ED and previous psychiatric disorders that could constitute a risk factor for the development of ED.

**Method:** A semi-structured interview was applied in the 2006–07 academic year and in the 2008–09 academic year. Firstly, a cross-sectional and non-randomized study on psychiatric morbidity was conducted with 993 teenagers between the ages of 12 and 16 from five schools in Valencia (Spain). Secondly, the students of one school were reassessed (326 adolescents between 14 and 17 years old) in order to detect new cases of ED and find associations with previous psychiatric disorders.

**Results:** The ED prevalence was 3.6% according to DSM-IV diagnostic criteria. Cross-sectional analysis revealed that 62.9% of individuals with an ED had comorbid disorders: anxiety disorders (51.4%), attention deficit hyperactivity disorder (31.4%), oppositional defiant disorder (11.4%), and obsessive compulsive disorder (8.6%). Prospective longitudinal analysis showed an ED incidence rate of 2.76% over the course of two years. The 22.2% of new cases had received previous psychiatric diagnoses, in which all were anxiety disorders.

**Conclusions:** ED exhibited a high comorbidity rate among adolescent populations. Anxiety disorders were the most common comorbid diagnosis and could represent risk factors for the development of ED.



## **SUBSTANCE USE DISORDER IN PATIENTS DIAGNOSED WITH AN EATING DISORDER**

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### **Objectives**

The aims of this study is to determine the substance use prevalence in a specific unit with patients diagnosed with an eating disorder and describe the differences between anorexia nervosa patients and bulimia nervosa patients.

### **Methods**

This is a retrospective study with a sample of 366 patients diagnosed with an eating disorder receiving care in a specific unit from March 2006 to June 2011. 96 patients were excluded from the study for lack of data on the use of drugs. In this sample, 39.3% (n = 106) have a diagnosis of anorexia nervosa, 48.15 % (n = 130) bulimia nervosa and the remaining 12.6 % (n = 34 ) eating disorder not otherwise specified.

At the initial assessment the patients were evaluated by a nurse and a psychiatrist and in the second assessment were evaluated by a clinical psychologist. In these evaluations we obtained sociodemographic and clinical data and the patients completed a self-administered battery tests to assess eating behavior, motivation to change and the presence of psychiatric comorbidity.

### **Results**

We found that 21.5% (N = 58) of patients had a comorbid substance use disorder. When we analyzed the differences between patients with substance use disorder and patients without it we found that patients with a substance use disorder get a lower score (20.42 vs 24.02) in the subscale "Action" of the ACTA questionnaire and get higher scores in the subscale "Positive Symptoms" (76,21 vs 66,72) of the SCL-90-R questionnaire. We also found a positive correlation between personality disorder and substance use disorder (phi coefficient 0.134).

### **Conclusions.**

21.5% of patients diagnosed with an eating disorder have a comorbid substance use disorder. These patients have also an increased risk of a personality disorder, fewer strategies to manage the eating disorder symptoms and greater variety of psychopathological symptoms.

## THE QUESTIONNAIRE OF EATING BEHAVIOURS: A NEW INSTRUMENT FOR SYMPTOMS OF EATING DISORDERS

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**Objectives:** The Questionnaire of Eating Behaviours is a short questionnaire about all the eating symptoms of each Eating Disorder, including Binge Eating Disorder, recently defined as a distinct diagnosis in DSM V. After a first validation in 2010 which showed that the instrument distinguished between clinical and control subjects, our aim is to perform a further validation, including construct and convergent validity.

**Methods:** The Questionnaire of Eating Behaviours (Scheda dei Comportamenti Alimentari, SCA) is a self-administered questionnaire composed of 13 items regarding all the eating symptoms of Eating Disorders. The person is asked to indicate the frequency of each behaviour over the last three months. The items are divided into 3 scales: Restrictive Eating, Weight Control Practices and Binge Eating. The SCA was given to 200 outpatients with Eating Disorders. Eating Disorders Inventory and Binge Eating Scale were also administered. One-way ANOVA was performed to compare SCA scores of the four diagnostic subtypes (Anorexia Nervosa, Bulimia Nervosa, Binge Eating Disorder, Eating Disorder Not Otherwise Specified). Factor analysis was performed to evaluate construct validity and Pearson correlation for convergent validity.

**Results:** Scores of the four diagnostic subtypes significantly differ on each scale. The factor analysis showed the presence of three factors, corresponding to the 3 scales. Convergent validity appears to be good for the scale of Binge Eating.

**Conclusions:** The Questionnaire of Eating Behaviours appears to be a valid instrument, effective in distinguishing patients with different Eating Disorders.

## RELATIONSHIP BETWEEN BODY IMAGE, PERSONALITY FACTORS AND EATING DISORDERS

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**Objectives:** The objective is to analyze the relationship between body image and personality traits on the one hand, and eating disorders, on the other, in two stages of adolescence (11 and 13).

**Method:** The sample consisted of 100 schoolchildren from Spain. They did a follow-up evaluation included the 11 and 13. The assessment instruments were: Body Mass Index, Body Parts Satisfaction Scale, Body Shape Questionnaire, Distressing Situations test and Body Image Avoidance Questionnaire for the variable "Body Image". "Drive for Thinness", "Bulimia" and "Body Dissatisfaction" (EDI-2) for the variable "Food Dysfunctions" and EPQ Scales for variable "Personality".

**Results:** "Drive for Thinness" in children did not correlate with any of the variables of "Body Image" and "Personality" at age 11, at age 13 correlated with "Body Form" and "Introversion". In girls at age 11, correlated with "Psychoticism" and at the age 13, correlated with "Body Form", "Social Stress", "Avoidance of the Body" and "Neuroticism". "Bulimia" correlated positively with "Body Shape" in children at age 11 and "Neuroticism" at age 13. In girls at age 11, found a positive correlation with "IMC" and at age 13 with "Body Form", "Social Stress", "Psychoticism" and "Asocial Behavior". "Body Dissatisfaction" was related in children at age 11 with "IMC" and at age 13 with "Body Shape". In girls, at age 11 correlated with "IMC" and at age 13 with "Body Form", "Social Stress", "Avoidance of the Body" and "Introversion".

**Conclusions:** The presence of altered body image is related to a higher "Drive for Thinness", both boys and girls. Alterations in body image and personality traits, neurotic (in children) and psychotic (in girls), were positively related to the presence of bulimic behaviors. Finally, the changes in body image were also related with Body Dissatisfaction, affecting girls more than boys.

## **FATHER OF ADOLESCENT GIRLS WITH ANOREXIA NERVOSA OR BULIMIA: A QUALITATIVE STUDY ABOUT THEIR LIFE EVENTS AND EMOTIONAL EXPERIENCES**

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**Introduction:** Eating disorders (ED) are severe psychiatric disorders affecting mainly teenage girls and young women. There is evidence that family aspects play important role in the aetiology and outcome of ED. Most researches in this field focus on mother but aspects related to the patients' father have been poorly studied.

**Objectives:** To understand the emotional experiences and life events of the father of adolescent girls diagnosed with anorexia nervosa or bulimia.

**Method:** Qualitative in-depth interviews were carried out with 12 men, fathers of adolescent girls in outpatient treatment at the General Hospital of the State University of Campinas, Brazil. The data was submitted to qualitative analysis regarding categories of content, and the interpretation of results drew upon multiple database review studies.

**Results:** Eight men of the sample spent their entire childhood in the countryside, working in agriculture since childhood. Qualitative analysis yield eight categories of contents: Born in the farm and raised working in the fields; Respect for parents; Admiration for the father; The dream of being a father; Family affected by alcohol and drug use; Explosive temper; Shocked when ED came up and the fear of daughter's death; Feeling of powerlessness and guilty.

**Conclusion:** Fathers showed to be concerned about their daughters' health and wished to see them overcome ED. Participants showed a strong sense of family and talk about the role of father as a dream that came true. Their explosive temper, alcohol and drug misuse and ED itself maybe are related to a feeling of guilty and powerlessness. The findings may help to keep fathers of ED adolescents motivated to the treatment. This understanding can contribute to therapists to help them to regain their ability to care for their daughters, getting close to them again and improving father-daughter relationship.

## PREVALENCE OF PSYCHIATRIC DISORDERS IN SIBLINGS OF EATING DISORDER PATIENTS

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### Objectives:

- To establish the prevalence of both general psychiatric pathology and Eating Disorders (ED) in siblings of patients with ED depending on gender.
- To determine the prevalence of anxiety disorders, mood disorders, substance abuse disorders in siblings of patients with ED.
- To determine the existence of antecedents of childhood psychopathology in siblings of patients with ED.

**Methods:** K-SADS interview was applied to a sample of siblings of ED patients (n=34, mean age=23.8). Data were analyzed using SPSS v.19. ED group included Anorexia Nervosa, Bulimia Nervosa and Binge Eating Disorder. Anxiety disorders included specific phobias, social phobia, generalized anxiety disorder and obsessive compulsive disorder. Mood disorders included major depression and dysthymia. Substance abuse disorders included alcohol and other drugs misuse. Childhood psychopathology included ADHD, Separation Anxiety Disorder and Oppositional Defiant Disorder. Tobacco abuse was not considered when the prevalence of general psychiatric pathology and substance abuse were established.

### Results:

	Psychiatric disorder (Prevalence, %)
Female	65.3
Male	50
Total	61.8

**Table 1 - Prevalence of a psychiatric disorder depending on gender**

	Eating Disorder (Prevalence, %)
Female	11.5
Male	0
Total	8.8

**Table 2 - Prevalence of an Eating Disorder depending on gender**

	Substance Abuse	Mood Disorder	Anxiety Disorder	Childhood Disorder
Prevalence (%)	33.3	6	30.3	11.8

**Table 3 - Prevalence of different groups of psychiatric pathology. No siblings presented mania, cyclothymia, schizophrenia or schizoaffective disorder**

### Conclusions:

- The prevalence of a psychiatric diagnosis was higher in siblings of patients with ED (61.8%) than in general population (19%). Sisters had a higher prevalence of a psychiatric disorder than brothers.
- EDs were more frequent in our sample (11.5%) than in general population (4.8%). No brother presented an eating disorder.
- The most frequent diagnostics in siblings were substance abuse and anxiety disorders.

## PSYCHIATRIC DISORDER AND EATING DISORDERS

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### Objectives

The main objective of this work to analyze the prevalence of psychiatric comorbidity in patients with eating disorder behavior in the Day Hospital Central de Asturias Hospital in the period between 2009 and 2013, and the frequency of occurrence of personality disorders .

### Methods

It has reviewed a total of fifty-six medical records pertaining to the subjects treated in the Day Hospital disordered eating behavior of Oviedo, in the last five years. We analyzed sociodemographic, diagnostic and food according to the criteria of the Tenth International Classification of Diseases (ICD -10 ) and comorbidity in personality disorders and other psychiatric illnesses.

### Results

Regarding the alimentarios diagnosticos , more than half are in the BN group (56.4% ) , 39.3% being the AN group , the rest of the Eating Disorder are unspecified ( 5.3% ) . Trastronos affective in our sample is 42.9 % , with 3.6 % of psicotic disease. Personality disorders : 44.6 % is represented by instability personality and 16.1 % to dependent personality. As the average age of the above shows there is great variability , with an average age 32, with a 9.53 dt .

### Conclusions

The association of BN with Axis II pathology is similar , in our sample with other studies. In the case of AN is not so clear , being the largest association in our sample with depression and other personality disorders .

## CELLULAR IMMUNITY AND FAMILY FUNCTIONING IN BULIMIA NERVOSA

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**Introduction:** In the last years, the idea that the nervous system and the immune system are separate systems seems to have been rejected. Stress in everyday life is associated with change in immune function. In recent years, the immune status of patients with eating disorders has received increasing attention. It is known that family conflict and family dysfunction (especially conflicts and high levels of control) are common in families of these patients (1, 2).

**Objectives:** Analyze the relationship between perceived family conflict and immune cell counts in patients with bulimia nervosa

**Methods:** Forty-five patients with bulimia nervosa were evaluated (mean age=24,7 years, S.D.= 6,4); all were women; age of onset of disorders: 18,1 years S.D.= 5,7; Body Mass Index mean= 24,2 kg/m<sup>2</sup> S.D.=5,0. BITE scale (Henderson and Freeman, 1987) was used to measure bulimic psychopathology, and FES scale (Moos and Moos, 1994) was used to evaluate family environment. The leukocyte and lymphocyte counts were made using routine laboratory methods. Statistical analysis was realized using SPSS.19.

**Results:** In the regression model, the score on the subscale of the FES "Conflict" was the strongest predictor of immune status. The body mass index, severity of symptoms and duration of illness was not associated with any of the subscales of the FES.

**Conclusions:** Our results support the theory that environmental factors are associated with immune function, and interpersonal support could play an important role as a modulator of immune activity.

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## “SYMBIOTIC TIES: STUDY OF THE ATTACHMENT BETWEEN MOTHER FIGURES AND PATIENTS WITH EATING DISORDERS”

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1. Objective: the present revision has the finality of identifying the motherly bonds which can favor the development of an eating disorder and analyze the origins of these types of bonds
2. Method: to that objective we analyzed the files of outpatients with ED who maintain a dyadic pattern of dependence towards their maternal figure; then the biographical histories of the mothers were analyzed, so as to establish the problem pattern of the patient and be able to adequately design intervention plans.
3. Results: after analyzing clinical files, we observe that there are various factors in the histories of the mothers which influence a dependent type of relationship with their daughters. Especially notable where histories of emotional deprivation and loss during childhood, producing identification with their daughters and the need to obtain from them what they did not find in their parents. In other cases there was a conflict in their marriage, and a channeling of anxiety onto their daughters, seeking in them the affection lacking from their spouse. In any case, the growth of the child and development into adulthood is a threat to the mother, so any movement of the child towards independence will bring about a response which makes the child retreat to a position of defenselessness manifested through illness.
4. Conclusion: It is important to take into account the role of families in the origin of mental illness, reason for which we consider it necessary to explore the family history and include the family in the therapeutic process.
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## WHITE MATTER ABNORMALITIES AT THE ONSET STAGE OF ANOREXIA NERVOSA IN ADOLESCENTS

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**Objectives:** Few studies have examined White Matter (WM) integrity in long-lasting Anorexia Nervosa (AN) and recovered AN patients using Diffusion Tensor Imaging (DTI) and have showed several WM alterations. The aim of this paper was to investigate WM integrity at the onset stage of AN in adolescents.

**Methods:** twelve right-handed outpatient female adolescents with AN (mean age: 15,5; SD 1,7), whose AN had been in progress for less than 6 months and with no other psychiatric disorders, and 12 right-handed, age-matched healthy female adolescents (mean age: 15,9; SD 1,8) were studied. DTI images were analysed using the Tract-based spatial statistics (TBSS) toolbox.

**Results:** The TBSS analyses, conducted with a  $p < 0.05$  corrected for FWE, did not yield significant differences between the AN sample and control group in Fractional Anisotropy (FA) values. AN patients showed lower Mean Diffusivity (MD) in clusters located at the forceps major, left and right inferior fronto-occipital fasciculus and left inferior longitudinal fasciculus, as compared to the control group. MD values of the forceps major in AN patients were negatively correlated with body image distortion scores ( $p < 0.005$  uncorrected). MD values of the right inferior fronto-occipital fasciculus in AN patients were negatively correlated with anxiety scores ( $p < 0.005$  uncorrected).

**Conclusions:** Our sample of AN outpatients showed that FA integrity is preserved at the onset stage of the disease. The MD value decrease in the forceps major, inferior fronto-occipital fasciculus bilaterally and left inferior longitudinal fasciculus suggest an early specific vulnerability of these WM tracts in AN. The correlations between these WM tracts alterations and the characteristic symptoms of AN suggest that such WM alterations can have a role in the pathophysiology of AN. Further research is necessary to confirm these results and to identify the causes, specific roles and consequences of such structural alterations.

## THE ROLE OF PERFECTIONISM IN THE EFFICACY OF DIETARY THERAPY FOR WEIGHT LOSS

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**Objectives:** to analyze the role of perfectionism, self-esteem, body image dissatisfaction/BID and positive/negative affect in the efficacy of dietary therapy (operationalized as percentage of weight loss) in overweight females.

**Methods:** 78 girls (mean age=21.1±3.37 years; mean BMI=29.7±4.249 kg/heaght<sup>2</sup>) were anthropometrically assessed and answered the Portuguese validated versions of self-report questionnaires to assess the psychological variables at the first nutrition consultation/T0. All the participants engaged in a nutritional intervention. 58 girls (74.4%) were also assessed at three months after T0 (T3) and 18 girls (23.1%) at six months after T0 (T6).

**Results:** At T3, percentage of weight loss significantly and positively correlated with Positive Affect/PA, Self-Prescribed Perfectionism/SOP, Personal high standards/PHS, Order and Self-Esteem/SE and negatively correlated with Negative Affect/NA, Social Prescribed Perfectionism/SPP, Perfectionist Discrepancy/PD, and BID. At T6, percentage of weight loss significantly and positively correlated with PA and PHS. At T3 and considering the psychological variables measured at T0, percentage of weight loss significantly correlated with Order; at T6 it significantly correlated with PHS, Order and PD.

At T3, significant ( $p<.05$ ) predictors of percentage of weight loss were BMI ( $\beta=-.407$ ), PA ( $\beta=.537$ ) and PD ( $\beta=-.282$ ). At T3 and considering as independent variables the psychological variables measured at T0, Order ( $\beta=.339$ ) was a significant predictors of percentage of weight loss. At T6, BMI ( $\beta=.411$ ) and PHS ( $\beta=.667$ ) were significant predictors of percentage of weight loss. Controlling for BMI, PHS significantly increments the percentage of percentage of weight loss variance from 3.8% to 46.6% [ $R^2$  Change=.435,  $F(1, 15)=13.830$ ,  $p=.002$ ].

**Conclusion:** The present work proves, for the first time, that positive perfectionism is prospectively associated to the efficacy of dietary therapy.

## **PARENT'S PSYCHOPATHOLOGY PATIENTS WITH EATING DISORDERS. K-SADS INTERVIEW TO MOTHERS AND FATHERS**

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### **Objectives**

Frequently, have been met some members of the same family concerned with some eating disorder (ED) or another mental illness. This one suggests that family factors are implicated in eating disorder's etiology.

The objective of this study is defining the psychopathology in parents of patients diagnosed from ED in Politecnico and University Hospital La Fe from Valencia.

### **Methods**

In base to the naturalistic, observational and cross section study, the K-SADS interview Spanish adaptation was used over 64 parent's (35 mothers and 29 fathers) patients diagnosed with ED. The statistical analysis was taken by 15th version of SPSS program.

### **Results**

The biggest prevalence was for the anxiety disorders: 7,7% for generalized anxiety disorder; 14,1% for specific phobia and 9,4% for agoraphobia. In addition they showed more comorbidity with others pathologies. In order to affective disorders, dystimia yielded 3,1%. In no case for psychotic or hyperactivity disorder in parents. One mother had a ED. Furthermore, sample half smoked, at least, 1 or 2 cigarettes by week.

### **Conclusions.**

Anxiety disorders were the most prevalent in the parents' sample. One mother only was affected with ED. Comorbidity between specific phobia and another anxiety disorders.

It is not possible to establish a causal relation because this is an observational study. As well as, the sample size complicate to discover some psychopathology in parents

## **ANOREXIA NERVOSA AND CARDIOVASCULAR COMPLICATIONS.**

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Anorexia nervosa is an eating disorder characterized by diminished food intake, translated in possibly grave malnutrition. In occasions, patients misuse drugs (laxatives and diuretics) that they believe that could provoke this weight loss and that can led to potentially lethal complications. Cardiovascular complications are frequent, fundamentally as bradycardia, hypotension, polarization alterations and death.

We present two cases of two patients admitted in the Eating Disorder unit of Ciudad Real, with severe cardiovascular alterations.

The first case is a 15 years old boy admitted with a BMI of 15.3. The patient referred tiredness and dizziness related to exercise for a couple of months. Denied to have a diminished food intake but admitted an important increase of physical activity during the previous months. His ECG showed a 40bpm bradycardia. Structural pathology was ruled out after an ECG, a Holter monitor test and an ergometry were preformed, giving the diagnosis of malnutrition with no cardiopathy associated, and the alterations were attributed to extenuating physical exercise.

The second case is a 27 years old woman, seen in the emergency unit for oppressive and irradiated chest pain, the ECG showed an ST segment depression in the infero-lateral wall. The patient refused previous medical history, but in her blood analysis a 1.6 potassium level was found, recognizing at last, that for a couple of years she abused of the drug furisemide, as much of 15 pills a day.

The weight loss process causes an important muscular mass loss that can be complicated by the electrolyte and minerals alterations due to the frequent use of laxatives, diuretics and emetics, this being a cardiological risk factor.

## **CHARACTERISTICS OF THE FEMALE PATIENTS ADMITTED IN AN EATING DISORDERS UNIT AT THE HOSPITAL.**

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### **Objective**

The aim of the study is to analyze the characteristics of the female patients admitted in the Eating Disorders Unit (EDU) in order to develop a future action plan.

### **Method**

It is a retrospective descriptive study of all the patients admitted during the year 2013 (n=56). The variables were collected by clinical history reviewing.

### **Results**

98% of the sample was women. There were 16 readmissions of 7 patients, 5 of which were readmitted twice and other two patients three times. Mean hospital stay was 44.1 days, requiring higher stay patients with ages 26-30. 27% of the patients were 21-25 years old and 25% more than 35. 73% were residents of Castilla la Mancha, following Extremadura and Andalucía with 7%. Educational level: 98% had done the compulsory education, and 34% had university studies. Clinical history: 57% somatics, 60% drug use (mainly tobacco) and 83% psychiatric. 50% had familiar history of mental disease. 18% had a body mass index (BMI) lower than 15 prior to the admission, 11% of which achieved a considerable increase in BMI at the time of discharge. Diagnosis: 45% restrictive anorexia and 32% unspecified eating disorder. The more common comorbidities were Mood Disorders and Personality Disorders.

### **Conclusion**

It is surprising that up to 25% of the sample exceed 35 years old, from which can be deduced that the lower proportion of young patients is due to a better outpatient specialized treatment. As proven by the scientific literature, most of these patients have a very long psychiatric history. The most prevalent diagnosis was Restrictive Anorexia.

## **PSYCHOPATHOLOGY IN FIRST-DEGREE RELATIVES OF PATIENTS WITH EATING DISORDERS (E.D). USING THE SCL -90 SELF-ADMINISTERED QUESTIONNAIRE.**

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### **Objectives:**

Naturalistic, observational, cross-sectional study to determine psychopathology in first-degree relatives of patients diagnosed from ED and monitored at ED unit at Hospital Universitario y Politécnico La Fe.

### **Methods:**

Sample: 99 first-degree relatives (29 fathers; 35 mothers; 9 brothers; 26 sisters). We used the Spanish version of the SCL -90 self-report scale, obtaining as results the following symptom dimensions: somatization, obsession-compulsion, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation and psychoticism. Conversion of raw scores is performed in standardized T scores. We have considered person "at risk" any score equal to, or greater than 63.

### **Results:**

Somatization (parents: 27.5%, mothers: 25.7 %, brothers: 0%, sisters: 15.38 %), obsessive-compulsive (parents: 34.5 %, mothers: 22.85%, brothers: 22.2%, sisters: 46.15 %), interpersonal sensitivity (fathers 31%, mothers, 31.43%, brothers: 0%, sisters: 50 %), depression (fathers 17.25%, mothers: 28.57 %, Brothers: 0%; sisters: 23.07 %), anxiety (fathers 24.1%, mothers, 14.28%, Brothers: 0%; sisters: 26.92 %), hostility (parents: 10.34%; mothers: 11.43%; brothers: 0%; sisters: 23.07 %), phobic anxiety (fathers 20.68 %, mothers: 5.71% , Brothers : 0%; sisters: 7.69 %), paranoidism (parents: 31%, mothers: 25.70%, brothers: 11.11%, sisters: 38.46 %), psychoticism (fathers 31%, mothers 20 %, brothers 0 %, sisters: 30.76%).

### **Conclusions:**

According to current literature, in our sample it is appreciated the presence of psychopathology, or at least the risk for psychopathology, in first-degree relatives of these patients. We can point out a higher prevalence of psychopathology in the group of sisters. This prevalence is higher than the appreciated in the groups of brothers and parents, which may be related to parenting patterns, according to previous studies.

High prevalence of paranoidism and psychoticism are outlined in the patients' relatives, over affective and anxiety symptoms. This is an observational study, so we can not establish a causal relationship between psychopathology in relatives and patients.

## **POSITIVE REACTIONS TOWARDS EXTREMELY EMACIATED BODY PICTURES IN ADOLESCENTS WITH ANOREXIA NERVOSA: A STUDY BASED ON THE STARTLE REFLEX PARADIGM**

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**Objectives.** In this study, we investigated the emotional processing of extremely emaciated body cues in adolescents with ( $n = 36$ ) and without ( $n = 36$ ) anorexia nervosa (“AN”), introducing a new picture type, which was taken from websites that promote extreme thinness (so-called “*Pro Ana* forums”) and are targeted specifically at adolescents interested in extreme thinness. In order to provide a relevant baseline for assessing the emotional reactions, emaciated body images were intermixed with images from a standardized affective image set.

**Methods.** To assess an objective, involuntary, physiological indicator of emotional valence, a startle eye blink reflex was recorded while viewing images. This paradigm is well known in addiction research: since the noise-elicited startle reflex increases for unpleasant pictures and decreases for pleasant pictures relative to neutral ones, it is a reliable measure for emotional reactions that the individual is not conscious of or that the individual wants to hide or to suppress.

**Results.** We found a significant group difference with a startle inhibition (appetitive, i.e. positive response) among the patients and a startle potentiation (aversive response) among the controls, whereas no such difference for subjective measures (Self-Assessment Manikin) was found. This finding is consistent with studies regarding other addictions and with observations in *Pro Ana* forums. However, it is contrary to findings of previous studies in AN as well as the first evidence for automatic appetitive reactions on addiction-specific stimuli in AN at all. No group differences in general emotional functioning, which might have biased the body cue results, were observed.

**Conclusions.** The findings suggest that a distorted positive view of extreme emaciation is a relevant motivational factor for self-initiated starving, and that exposure to pro-anorexic picture galleries evokes the drive to reach this extremely emaciated body ideal. Implications for prevention and therapy are discussed.

## EATING DISORDERS IN PEOPLE WITH INTELLECTUAL DEVELOPMENTAL DISORDERS

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**Objectives:** Eating Disorders (ED) have been assessed to prevail in about one third of people with Intellectual Developmental Disorders (IDD) and up to 80% in those with more severe impairment. Prevalence rates seem generally higher in inpatients with co-occurrent autism, Problem Behaviours (PBs), and when broad diagnostic criteria are used. The objective of this study was to investigate the prevalence of ED and other eating problems in a sample of People with IDD (PwIDD). A secondary aim was to compare by co-occurrence of Autism Spectrum Disorders (ASD).

**Methods:** The study sample was constituted by 206 adult individuals, consecutively recruited among those living in residential and rehabilitative facilities in Tuscany, Italy. Participants were screened for ASD through the assessment Scale of Autistic Traits in people with Intellectual Disabilities (STA-DI). The final diagnosis of ASD was made by a psychiatrist following DM-ID criteria. The presence of eating and feeding problems was preliminary assessed by filling a new structured interview specifically developed for IDD, and clinically confirmed still by application of DM-ID criteria.

**Results:** Anorexia nervosa and bulimia resulted to be not as frequent as expected, while a high prevalence of other eating and feeding problems was found. The prevalence of ED seems higher in PwIDD and autistic features than IDD alone.

Pica, food refusal, and food selection were found to be prevalent in people with ASD. The presence of PBs was associated with ED symptoms, in particular with bulimia and Bing Eating Disorder.

**Conclusions:** In PwIDD, an appropriate description and understanding of PBs or psychiatric disorders should include the possible presence of ED. In PwIDD eating and feeding problems seem to be more difficultly diagnosable with a major ED than in the general population. Further research is needed in order to better detect and understand specific presentation of ED in PwIDD and create tailored diagnostic tools.



## MELANOCORTIN-4 RECEPTOR GENE VARIANTS ARE NOT ASSOCIATED WITH BINGE-EATING BEHAVIOR IN NON-OBESE PATIENTS WITH EATING DISORDERS

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**Objective:** We hypothesized that genetic variants in the melanocortin-4 receptor (*MC4R*) gene, predisposing to hyperphagia and obesity (1), may also be present in non-obese patients with binge-eating behavior. We also aimed to determine whether those mutations could be related to anthropometric or psychopathological parameters in these patients.

**Methods:** The coding region of the *MC4R* gene was sequenced and searched for mutations in three groups, non-obese patients with binge-eating behavior who were diagnosed with Bulimia Nervosa (BN) or binge-eating disorder (BED) (n=77); individuals with severe early-onset obesity (n=170) and lean women with Anorexia Nervosa (n=20). A psychometric evaluation, using the EDI-2 and SCL-90R questionnaires, was carried out for all the patients with eating disorders (ED).

**Results:** In the obesity group, ten different genetic variants were identified in heterozygosis, namely R7H, G32E, H76R, V103I, S127L, R147G, T150I, I251L, G252S, and G 323E. However, in the binge-eating patients, only two individuals with BN were found to carry the same polymorphism (I251L). There were no significant differences between carriers and non-carriers of the 251L variant with regard to weight, BMI or psychopathological features.

**Conclusion:** To our knowledge, this is the first study that analyzes the clinical relevance of *MC4R* mutations in non-obese patients with eating disorders. We found no evidence that these mutations are associated with binge-eating behavior in these subjects.

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## **CARE ACTIVITY OF A UNIT OF INTENSIVE TREATMENT EATING DISORDERS IN ADULT POPULATION**

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Describe care activity during 2013 Unit Eating Disorders Santa Cristina University Hospital. Madrid, Spain, the team of professionals morning shift, compared with the clinical activity of 2012. Hypothesis for the observed changes.

This analysis was performed at year-end 2013, compared with the data obtained at the end of 2012. The activity is accounted for using as a tool the hospital database (HPHIS).

In 2012: At the TCA unit totaling 9,007 attentions, of which 5810 were held in solitary care Day Hospital, the rest Outpatient regime were made.

In 2013: At the TCA unit attentions totaling 10,176, of which 6,183 were held in solitary care Day Hospital, the rest Outpatient regime were made.

On the morning shift team in outpatient regime were:

Psychiatrist (919 interventions)

First consultations 62; Reviews 393; Patient Family Care 464.

Psychology (813 interventions)

First consultations 45; 395 Reviews, 373 Family Care

Occupational Therapy Interventions 177

An increase in the performance of the activity Day Hospital in the past year objective. There is increased attention to families in an attempt to improve efficacy of eating disorders restrictive profile purging with families (family therapy, family groups and multifamily groups), allowing that despite being a small team performance has improved patient care coverage in the last year. At this point there appears to be unanimous agreement that the form of creative work and higher performance is based multidisciplinary teams and teamwork.

## **DSM-IV AXIS I PSYCHIATRIC DISORDERS COMORBIDITY IN EATING DISORDERS AMONG CLINICAL SAMPLE**

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**Objective:** To analyze comorbidity between eating disorder (ED) and other DSM- IV axis I psychiatric disorders in a clinical population sample. We expected to determinate the association between ED and other psychiatric disorders.

**Method:** A semi-structured interview was applied in a sample of 36 female patients with ED; ages 15 – 36 years (mean age  $21.4 \pm 5.5$  years). Diagnosis were 88.8% with anorexia nervosa (AN) (65.6% restrictive subtype, 34.4% purgative subtype), 11.2% with bulimia nervosa (BN) (75% purgative subtype, 25% non- purgative subtype). No other ED was found in the sample.

**Results:** Cross-sectional analysis revealed that 61.2% of ED patients had comorbid DSM-IV Axis I psychiatric disorders: anxiety disorders (81.8%), mood disorders (45.4%), obsessive compulsive disorder (31.8%), attention-deficit / hyperactivity disorder (13.6%). Regarding to anxiety disorders, our findings were: generalized anxiety disorder (54.5%), simple phobia (31.8%), agoraphobia (63.6%) and social phobia (18.1%). In our study, 38.8% of ED patients did not have comorbid psychiatric disorders in the interview. Half of the patients with comorbidity had more than one comorbid DSM-IV Axis I psychiatric disorder.

**Conclusions:** ED patients exhibited a high comorbidity rate, being anxiety disorders the most common comorbid diagnosis. No differences were found across the ED spectrum, apart from obsessive-compulsive disorder, which was more frequent in patients with AN. Another interesting result is the comorbidity between ED and attention- deficit / hyperactivity disorder, as has been reported in previous studies. Our findings ratify similar correlations between anxiety, mood and obsessive-compulsive disorders in ED patients, according to previous studies.

## **FOOD SYMPTOMS IN RELATIVES OF PATIENTS WITH EATING DISORDERS. USING THE SELF-ADMINISTERED QUESTIONNAIRE OF EATING BEHAVIOR.**

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**BACKGROUND:** Family studies show the evidence of the influence of hereditary factors in the occurrence of nervous anorexia (NA) and nervous bulimia (NB). First degree relatives of patients with NA have a risk ten times bigger to present NA than the relatives of individual non-affected. In addition, researches have suggested that in relatives' NA patients exist an incremented risk to suffer others eating disorders between relatives' NA patients, indicating that NA and NB have a tendency to cover up. This could seem that exist a certain common genetic vulnerability.

**AIMS:** To determine the presence of food symptoms in relatives of patients diagnosed with eating disorders in the Hospital Universitario y Politécnico la Fe de Valencia.

**MATERIAL AND METHODS:** The sample included 99 first-degree relatives of 36 patients diagnosed with NA and NB according to DSM -IV. EDI (Eating Disorder Inventory) applies. In our project we evaluated only five of the eight subscales: impulse to thinness, body dissatisfaction, ineffectiveness and low self-esteem, perfectionism and bulimic symptoms. For statistical analysis of the data was used SPSS version 15.0.

**RESULTS:** Mothers and sisters achieve high scores in low self-esteem than males (siblings and fathers). The fathers scored higher on perfectionism, followed by sisters and brothers far above mothers. No differences between familial cases and Bulimia scores. In all cases except in Bulimia, patients obtained higher scores than the relatives.

**CONCLUSIONS:** No significant differences between first-degree relatives of patients in subscale scores (ie, sisters, brothers, parents) fail to have significant differences between them. This may be due to the small sample size of the study.

## **PRELIMINARY STUDY OF ORAL HEALTH, OROFACIAL PAIN AND TEMPOROMANDIBULAR DISORDERS IN PATIENTS WITH EATING DISORDERS.**

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**BACKGROUND:** Eating disorders (ED) can lead to complications in general and oral health due to the presence of food restriction and purging.

**OBJECTIVE:** To evaluate and characterize the profile of a group of dental patients with ED and verify the presence of orofacial pain (OFP) and temporomandibular disorders (TD).

**METHODS:** 22 female patients diagnosed with restrictive anorexia nervosa (Group A), purging anorexia nervosa (Group B) and bulimia nervosa (Group C) were evaluated by clinical examination, questionnaires (clinical, sociodemographic and EDOF-HC questionnaire) and panoramic radiography.

**RESULTS:** Mean age was 34 years, and the DMF Index (decayed, missing and filled teeth) was 21. There were carious lesions in 16 patients, gingival resection in seven, gingivitis in four, oral trauma signs in two and signs of previous perimolysis in six patients. The occurrence of OFP is significantly higher ( $p < 0.001$ ) among those subjects who purged three or more times a day.

**CONCLUSIONS:** The dental status of such patients is poor, regardless of the presence of the purge, and the results suggest a relationship between the presence of purging and the development or worsening of orofacial pain, it is important that further studies be conducted because of the scarce literature.

## MODULATION OF IRISIN ON EXECUTIVE FUNCTIONS IN EXTREME EATING/WEIGHT CONDITIONS

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**Objectives:** Subjects in extreme eating/weight conditions, have common biological and environmental risk factors, including a similar dysfunctional executive profile. Recent evidence suggests that physical exercise can act as a cognitive enhancer, specifically on executive functions. Irisin is a recently discovered hormone, secreted after the cleaving of the membrane protein fibronectin type III domain containing 5 (FNDC5), and associated with some of the positive effects of physical activity. In humans, irisin has been correlated with body mass index, with elevated circulating levels observed in obese subjects and decreased levels in anorexia nervosa patients. However, whether its effects are also modulating the cognitive profile of such patients remains unclear. The idea behind the study was to explore the relationship between circulating levels of irisin and executive functions (decision making, response inhibition and cognitive flexibility) in extreme eating/weight conditions.

**Methods:** One hundred and forty five participants were included (30 anorexia nervosa patients, 66 obese subjects and 49 healthy controls) and assessed with the Wisconsin Card Sorting Test; Stroop Color and Word Test; and Iowa Gambling Task. All participants were female, aged between 18 and 60 years.

**Results:** Results showed a negative correlation between irisin and Stroop Color and Word Test performance ( $p < .05$ ). Higher levels of irisin also predicted better Wisconsin Card Sorting Test ( $p < .05$ ) performance but worse Stroop Color and Word Test ( $p < .05$ ).

**Conclusions:** These results show a relevant modulation of irisin on prefrontal-dependent cognitive functioning. Specifically, subjects with lower levels of irisin are in higher risk of showing both a dysfunctional executive profile characterized by alterations of cognitive flexibility but also higher capacity of inhibition response.

## **VIDEO GAME THERAPY FOR EMOTIONAL REGULATION AND IMPULSIVITY CONTROL IN A SERIES OF TREATED CASES WITH BULIMIA NERVOSA**

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**Objectives:** Although standard psychological treatments have been successful in treating several core features in eating disorders, other characteristics such as emotional regulation or impulsivity appear to be more resistant to change. There is a growing body of evidence to support the efficacy of cognitive remediation for cognitive and emotional difficulties in eating disorders. Playmancer/ Islands is a video game designed to specifically treat mental disorders, characterized by problems in impulse control. The objective of the game is to increase self-control over emotions, decision making and behaviours. The aim of this study is to describe the results from a consecutive series of nine bulimia nervosa patients who were treated with the video game in addition to cognitive behaviour therapy.

**Methods:** The outcomes included clinical and psychopathological questionnaires, and physiological measures were obtained during the video game.

**Results:** Emotional regulation improved, heart rate variability increased, and respiratory rate and impulsivity measures reduced after the treatment.

**Conclusions:** These findings suggest that video game training may enhance treatment for eating disorders.

## ARE SECOND-GENERATION ANTIPSYCHOTIC DRUGS EFFECTIVE IN TREATING ANOREXIA NERVOSA?

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**Objectives:** To determine the efficacy, acceptability, and tolerability of second-generation antipsychotic drugs (SGAs) in treating anorexia nervosa.

**Methods:** A systematic literature search was conducted to cover all randomized controlled trials (RCTs) comparing a pharmacotherapy with SGAs to placebo or no treatment in anorexia nervosa. The primary outcome was weight gain assessed by mean change in body mass index (BMI). Secondary outcomes were change of anorectic symptoms assessed by mean change in Yale–Brown–Cornell Eating Disorders Scale (YBC-EDS) total score and mean change in Eating Disorders Inventory (EDI) total score, the number of dropouts due to any reason (all-cause discontinuation), due to inefficacy, and due to adverse events. Using the random-effects model of Der-Simonian and Laird standardized mean differences based on Hedges's *g* (continuous outcomes) and Mantel-Haenszel risk ratios (dichotomous outcomes) were calculated.

**Results:** Seven RCTs investigating olanzapine (N=4), quetiapine (N=2), and risperidone (N=1) with a total of 201 subjects were included. There was no significant between-group difference in mean BMI change when comparing the pooled group of SGA drugs with the pooled control group (N=6, n=152; Hedges's *g*=0.17, 95% CI: -0.14 to 0.48; *p*=0.28). None of the examined single SGAs was significantly superior to placebo/no treatment in achieving BMI gain. Regarding the secondary outcomes, we found no significant between-group differences for all outcomes (YBC-EDS, number of dropouts) with the exception of the EDI total score which decreased statistically significant more in the pooled control group. The antipsychotic medication was well tolerated.

**Conclusions:** Because of lacking evidence treatment with SGAs cannot be generally recommended in anorexia nervosa although some individuals or subgroups of patients might respond to an antipsychotic medication. Further research is needed to identify which anorectic patients could probably benefit from treatment with antipsychotic drugs. The medication with SGAs was well accepted and tolerated in anorectic patients.

### Keywords

Anorexia-nervosa, second-generation antipsychotics, meta-analysis.



## EXPLICIT AND IMPLICIT EMOTIONAL EXPRESSION IN BULIMIA NERVOSA AFTER RECOVERY

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**Objectives:** This study aimed at examining the implicit emotional expression and explicit emotional expression in bulimia nervosa patients, in the acute state and in remission.

**Methods:** Sixty-three female subjects were included: 22 bulimia nervosa patients in acute state, 22 bulimia nervosa patients in remission state, and 19 healthy controls. Self reported or explicit emotional expression was measured with State-Trait Anger Expression Inventory-2, State-Trait Anxiety Inventory, and Symptom Check List-90 items-Revised. Implicit emotional expression was recorded using an integrated camera (by detecting Facial Feature Tracking), in response to a therapeutic videogame.

**Results:** In the acute illness explicit emotional expression was increased. After remission this was decreased to an intermediate level between the acute illness and healthy controls. In the implicit emotional expression measurements, patients with bulimia nervosa in acute state expressed more joy and less anger than both healthy controls and those in remission.

**Conclusions:** These finding suggest that there is a disconnection between implicit and explicit emotional processing in bulimia nervosa, which is significantly reduced after remission, suggesting an improvement in emotional regulation.

## **IMPULSIVITY IN OBESE WOMEN**

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Impulsivity has been repeatedly identified as a major problem in many diseases, one of which we cite the obesity. In fact, understanding and identifying this dimension in this kind of population would help prevent and treat overweight.

### **OBJECTIVES**

To evaluate the prevalence of impulsivity in a population of obese women and to investigate the association between impulsivity and overweight.

### **METHODS**

We compared, in a cross-sectional descriptive study, a sample of twenty women suffering from obesity ( $BMI > 30 \text{ Kg.m}^2$ ) to twenty controls ( $18.9 < BMI < 24.9 \text{ Kg.m}^2$ ). Patients with mental retardation, an overweight due to a hormonal disease were excluded from the study. Impulsivity were assessed by the Barrat impulsivity scale (BIS11).

### **RESULTS**

Obese women have revealed to be more impulsive than controls.

### **CONCLUSION**

The finding of greater impulsivity in obese compared to healthy-weight women may be tapping into a trait that is a factor leading to the development of obesity in women. A longitudinal study would be better able to disentangle this relationship.

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## **PATHOLOGICAL GAMBLING IN EATING DISORDERS: PREVALENCE AND CLINICAL IMPLICATIONS**

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**Objective:** Pathological gambling (PG) and eating disorders (ED) rarely co-occur. . We explored the prevalence of lifetime PG in ED, compared severity of ED symptoms, personality traits, and psychopathological profiles across individuals with ED and PG (ED+PG) and without PG (ED-PG). Finally, we assessed the incremental predictive value of gender on the presentation of a comorbid PG.

**Method:** A total sample of 1681 consecutively admitted ED patients (1576 females and 105 males), participated in the current study (25 ED+PG and 1656 ED-PG). All participants were diagnosed according to DSM-IV criteria. Assessment measures included the Symptom Checklist and the Temperament and Character Inventory-Revised, as well as other clinical and psychopathological indices.

**Results:** The observed lifetime prevalence of PG was 1.49%. ED subtype was associated with lifetime PG ( $p=.003$ ), with PG being more frequent in binge eating disorder (5.7%). ED+PG was more prevalent in males than in females (16% vs. 1.26%, respectively). Additionally, ED+PG patients exhibited more impulsive behaviours, lower impulse regulation and higher novelty seeking. Best predictors of ED+PG were novelty seeking (OR 1.030,  $p=.035$ ), sex (OR 3.295,  $p=.048$ ) and BMI (OR 1.081,  $p=.005$ ).

**Conclusions:** Some personality traits (novelty seeking), being male and higher BMI are strongly related to the presence of lifetime PG in specific ED subtypes (namely binge eating disorder).

## **OBSESSIVE - COMPULSIVE SYMPTOMS IN EATING DISORDERS. CASE- CONTROL STUDY**

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### **Objectives**

A growing literature suggests that obsessive-compulsive symptoms (OCS) and obsessive-compulsive disorder (OCD) occur in a higher proportion of patients with eating disorders, especially anorexia nervosa.

The present study aimed to know the relationship between OCS and the different subtypes of eating disorders in patients who had never received treatment for eating disorder.

### **Methodology**

This study focused on patients who came consecutively to the specific unit over a period of two years (2010-2011). The authors evaluated whether severity and subtype of OCS are associated with different subtypes of eating disorders. 200 patients with ED (and 14 AN, 55 BN y 103 EDNOS) and 200 healthy comparison subjects (HC) matched for gender and age completed questionnaires. An initial evaluation of sociodemographic, personality and biological factors was conducted the measurement were

The OCI-R is a self-report scale for assessing symptoms of Obsessive-Compulsive Disorder (OCD). And the EAT-26 the most widely used standardized self-report measure of symptoms and concerns characteristic of eating disorders.

### **Results**

The present study revealed a significant relationship between ED and OCS, supporting the previous literature. We found statistical differences in the six subscales of OCI-R between patients and d HC. ( $p < 0,01$ ). And between ED subgroups. The highest rates are founding in BN. (in each subscale and in total score). There were correlations between ED measures and OCI-R subscales.

### **Conclusions**

The association between AN and OCS has been well documented whereas this study signed the prevalence of this symptoms in BN too. A comorbid is so high that prevention, screening and treatment programs should be included and OCS component.

## **OBSESSIVE-COMPULSIVE SYMPTOMS AND OVER EXERCISING. EATING DISORDERS CASE- CONTROL STUDY**

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### **Objectives**

Some studies associate obsessive compulsive symptoms (OCS) with addiction to sports. On the other hand over exercise is related to Eating disorders especially anorexia nervosa. Alongside in these eating disorders there is a high comorbidity with obsessive clinic.

Therefore the aim of this study was to evaluate whether there was relationship between obsessive traits and over exercise in a sample of patients who had never received treatment and were suffering a disorder of eating behavior.

### **Methods.**

Two hundred male and female patients with ED who came consecutively to the specific unit over a period of two years (2010-2011) (14 AN, 55 BN y 103 EDNOS) and 200 voluntary healthy (HC) matched for gender and age participated in the study. ED age (M=29,1, SD=11,0) , HC (M=29,3, SD=10;7).

The physical activity indicators derived from the short version of the international Physical Activity Questionnaire (IPAQ). An initial evaluation of sociodemographic, personality and biological factors was done. Eating disorder screening was done with the eating attitude test (EAT-26) And obsessive compulsive symptoms were testing with the OCI-R (is a self-report scale for assessing symptoms of OCD the finding do not confirm the interaction between the overexercising and the obsessive compulsive symptoms.

### **Results.**

The total OCI- subscales were significantly higher in the ED group (P, 0,001) compared to HC. But there was no significant differences between the IPAQ rates (sedentary time, vigorous PA, moderate PA and moderate-to-vigorous PA. There were no significant differences between the groups and the ANOVA and correlation do not finding association.

### **Conclusions**

Despite The existence of a relationship between over exercise and obsessive - compulsive personality traits, these findings could not be confirmed in our eating disorder sample.

## “EVALUATING PERSONALITY TRAITS IN EATING DISORDER PATIENTS´RELATIVES”

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### OBJECTIVE

We present a naturalistic observational study designed to examine the prevalence of dysfunctional personality traits in a sample composed of eating disorder (ED) patients´ relatives and to study the relationship between the dysfunctional traits observed and the diagnosis of the patient.

### METHODS

The study was conducted during 6 months (2013-2014), at HUiP La Fe and consisted in the self-administration of the International Personality Disorder Examination (IPDE) questionnaire to 35 families (29 fathers, 32 mothers).

The ED was classified as purgative ED (purgative anorexia nervosa and bulimia nervosa) and restrictive ED (restrictive anorexia nervosa).

Data analysis was realized using IBM SPSS Statistics 22.0 software. A binary linear regression was realized to determine whether or not it exist a relationship between dysfunctional personality traits in the studied sample (fathers and mothers) and the presence of an ED diagnosis in their offspring.

### RESULTS

The most prevalent personality disorder in this sample was the obsessive-compulsive one (46,3%).

Our results revealed a statistically significant association between dysfunctional personality traits present in fathers and the ED diagnosis. Specifically, it seems to exist a relation between paranoid (age adjusted Odds ratio (IC:95%)= 13,5 (1-182,9)) and obsessive traits (OR<sub>a</sub>=6.6 (1.1-41.3)) with the purgative ED.

No significant relation was found in studied mothers.

### DISCUSSION

It has been described that family dynamics can influence and model the emergence and maintenance of eating disorders. In fact, specific characteristics such as obsessive personality in parents<sup>1, 2</sup> and parents' perfectionism<sup>3</sup> seem to be consistent risk factors for eating disorders.

Although clinical experience with ED families suggests that ED parents may not represent a homogeneous group and family dynamics may differ from a family to another, our results seems to support the previously referred hypothesis.

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## **AN ALTERNATIVE TO EATING BEHAVIOUR DISORDER. CLINICAL CASE**

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**Introduction and objectives.** The traditional point of view about eating behavior disorder is insufficient. Many patients convert the alimentary alteration in their life and their personal identity. We should adopt new perspectives in the conception, identification and treatment of this pathology. In this work, is illustrated an alternative perspective, by means of clinical case, it is based on a functional approach (what the symptom) rather than topographic (symptom description).

**Methods:** Rocío (28 years old), has great emotional discomfort, regressive behavior and child and day binge eating with major feeling of guilt that ends up causing self harm and numerous family discussions. There are repeated episodes of binge-restriction and abuse of laxatives as compensatory behavior. Following a family and personal assessment is conducted at the individual level interventions from the perspective of dialectical behavior therapy (basic awareness skills, interpersonal effectiveness skills, emotion regulation skills, and distress tolerance skills)and family (improving the conjugal couple, intervention triangulation, improving communication within the family system) with actions to establish proper eating habits (conducting a balanced diet without eating restrictions).

**Results.** After 12 months of treatment weekly, the self-harm and gluttony disappeared. There was not admission of hospital and the family relationships improved. The person achieved more emotional maturity and modulation of emotions.

**Conclusions.** Mainly, the therapeutic work will be to orientated to influencing the cause and maintenance factors, rather than in the problem itself (consequence).

## PLASMA LEVELS OF N-ACYLETHANOLAMINES IN PATIENTS WITH EATING DISORDERS

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**Objectives-** The endocannabinoid system influences feeding behavior with an important role in the regulation of energy balance. Significant changes in this system have been reported in eating disorders. N-acylethanolamines are chemical related to endocannabinoids but exhibit opposite effects in the control of appetite. While endocannabinoids such as anandamide promote feeding, oleylethanolamine induces satiety and suppresses food-intake.

The objective of the present study was to evaluate plasma levels of N-acylethanolamines in patients with anorexia nervosa restricting subtype (AN), bulimia nervosa purging subtype (BN) and binge eating disorders (BED). A group of patients with BN treated with SSRI was also evaluated.

**Methods-** An open observational study was conducted with 72 women. 48 patients with eating disorders according to DSM-IV criteria (n=12 for each group) and 24 age matched control women. Plasma levels of the two N-acylethanolamines, oleylethanolamine (OEA) and palmitoylethanolamine (PEA) were quantified using liquid chromatography and mass spectrometry.

**Results-** Data obtained in EDE-Q show higher and clinically significant restraint, eating, shape, and weight concerns scores in all groups of patients. Age matched control groups show no significant changes in EDE-Q scores. PEA plasma levels did not differ from control women. A striking reduction in OEA plasma levels was observed in the BED group with  $7.1 \pm 1.1$  pmol/mL comparing to  $26.3 \pm 3.0$  in age control women.

**Conclusions-** OEA, an N-acylethanolamine with satiating effect, is clearly reduced only in BED, this finding could explain compulsive eating and the absence of compensatory mechanisms leading to obesity in these patients.



## HOW DOES INFLEXIBLE EATING IMPACT ON DISORDERED EATING BEHAVIOURS?

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**Objectives:** Body dissatisfaction (BD) and social comparisons based on physical appearance (SCPAS) have been considered central risk factors for eating psychopathology (Ferreira, Pinto-Gouveia & Duarte, 2013). These factors have been linked to over-concern with dieting, weight and body shape, which may explain the engagement in dietary and other maladaptive eating behaviours (Stice, Marti, & Durant, 2011). Although behaviours to control weight are very common in women, there is a marked absence of studies that address the impact of rigid patterns of eating on eating psychopathology symptoms. Thus, our study aims to examine the role of body-related variables (BD and SCPAS) and inflexible eating (ERA) in eating psychopathology (EDE-Q), and additionally to examine whether ERA mediates the relation between these variables and EDE-Q.

**Methods:** For the purpose of this study, 841 female students (age  $18.37 \pm 2.98$  years old on average; BMI  $21.34 \pm 2.94$  on average) completed several self-report measures.

**Results:** BMI, BD, SCPAS and ERA presented significant correlations with each other and accounted for 54% of EDE-Q, with SCPAS, BD and ERA emerging (in an ascending order) as significant predictors of the model. To better understand ERA's role on EDE-Q, two mediational analyses were conducted. Results showed that ERA partially mediates the relationships between BD and EDE-Q ( $R^2 = .50$ ), and between SCPAS and EDE-Q ( $R^2 = .46$ ).

**Conclusions:** The present study corroborates previous findings concerning the impact of body dissatisfaction and social comparisons based on physical appearance. It also adds to literature by highlighting the main contribution of inflexible eating on the severity of disordered eating behaviours. Furthermore, this study suggests that the relationship between body-related perceptions and eating psychopathology partially depends upon the engagement in rigid patterns of eating. In fact, the adoption of inflexible eating rules seems to substantially increase eating psychopathological symptoms.

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## **DECENTER FROM YOUR BODY FLAWS AND BREAK FREE: HOW DECENTERING PROTECTS AGAINST DISORDERED EATING**

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**Objectives:** Decentering has been defined as the ability to deal with thoughts and emotions as subjective and ephemeral inner events. Since it implies a non-judging and present focused attitude towards thoughts and emotions, decentering has been considered as an important protective process against psychopathology (Fresco et al., 2007; Hayes, Strosahl, & Wilson, 1999). Nevertheless, its role in eating disordered attitudes and behaviours has not been fully uncovered. Therefore, the aim of the present study is to explore the moderator effect of decentering on the relationship between eating psychopathology and one of its main risk factors, body image dissatisfaction.

**Methods:** The sample comprised 279 female students, aged between 14 and 21 years-old, with a mean age of 17.88 years old ( $SD = 1.95$ ) and a mean BMI of 21.16 ( $SD = 2.72$ ).

**Results:** Results revealed that decentering abilities were negatively linked to body image dissatisfaction and to the global score of eating psychopathology. Through a path analysis the buffer effect of decentering was confirmed. Overall, the tested moderation model accounted for 47% of eating psychopathology's variance. Moreover, the plotted graphic representation clearly evidenced such buffer effect. Indeed, for the same level of body image dissatisfaction, the women that reported decreased abilities of decentering revealed an increased level of overall eating psychopathology symptoms, comparatively to those who revealed higher tendencies to decenter from thoughts and emotions.

**Conclusions:** The findings suggest that the ability to take a non-judgmental and accepting stance towards internal experiences entails a protective effect on disordered eating attitudes and behaviours. This study seems especially pertinent since it highlights a mechanism that diminishes the pervasive impact of body image dissatisfaction, which is highly prevalent in women from Western societies.

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## **ATTACHMENT SECURITY, MENTALIZATION AND THEIR RELATION TO SYMPTOMS IN EATING DISORDER PATIENTS**

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**Objective:** The objective of our study was to investigate the relationships between attachment security and mentalization on the one hand, and core and co-morbid symptoms in eating disorder patients on the other hand. Our hypothesis was that eating disorder symptoms as well as co-morbid anxiety, autonomy problems, psycho-neuroticism, borderline personality disorder and self-injurious behavior would all be associated with higher attachment insecurity and lower mentalization.

**Method:** Eating disorder patients (N=51) and healthy controls (N=20) were compared on attachment, mentalization, drive for thinness, bulimia, body dissatisfaction, anxiety, autonomy problems, psycho-neuroticism and self-injurious behavior, by using the Adult Attachment Interview, the SCID-I and II, the Eating Disorder Inventory, the State and Trait Anxiety Inventory, the Autonomy-Connectedness Scale-30, the Symptom Checklist-90 and the Self-injury Questionnaire.

**Results:** Compared with the controls, the eating disorder patients showed a higher prevalence of insecure attachment and a lower level of mentalization. In the patient group eating disorder symptoms, anxiety, psycho-neuroticism and autonomy problems were neither related to attachment security nor to mentalization; self-injurious behavior was associated with lesser attachment security and lower mentalization, as was borderline personality disorder. In the control group, eating disorder symptoms were negatively correlated to attachment security.

**Conclusion:** The low mentalization scores in the patient group suggest it might be useful to apply Mentalization Based Treatment techniques in the treatment of eating disorder patients, especially in case of self-injurious behaviour and/or co-morbid borderline personality disorder.

## **CHILDHOOD TRAUMA AND EATING DISORDERS IN ADULTHOOD: BRIEF REVIEW AND CASE REPORT**

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### **Objectives**

In relation of a clinical case, the aim is to do a brief review about the association between childhood trauma, such as emotional abuse and neglect, and adult psychopathology, describing a case of eating disorder.

### **Methods**

Consultation and review of the patient clinical file, as well as published and referenced scientific articles on MedLine/PubMed.

### **Results**

The past decades have witnessed an increasing societal awareness of high incidence of childhood trauma. Past studies on the relationship between childhood adverse experiences and eating disorders, has focused in the role of sexual and physical, but not on emotional trauma.

Evidence is growing that emotional abuse and neglect are implicated in the etiology of a wide range of adult psychopathology, in particular, eating disorders, including anorexia and bulimia nervosa and binge eating disorder. In fact, some studies show that emotional abuse is the form of childhood trauma that most influences eating psychopathology.

As for the clinical case, it is a female patient, 20 years old, history of depression and suicide attempt, with Anorexia Nervosa. This is a patient with a life path marked by negative experiences in childhood, such as her mother's emotional neglect and abuse, the absence of her father, without any other family support. She described her family environment as emotionally cold, distant and unsupportive, characterized by frequent criticism, insults and rejection, consistent with high levels of emotional abuse and neglect.

### **Conclusion**

The experience of emotional trauma during childhood not only generates distress and disturbance at the time but may also produce long-term deleterious effects.

Studies indicated higher rates of emotional trauma in patients with Anorexia Nervosa. Survivors are thought to be vulnerable to concerns about body image, poor self-esteem and restrictive eating.

This report shows the importance of detecting the full range of possible childhood traumatic experiences for a better understanding of adult psychopathology.

## **INCREASED PSYICAL ACTIVITY IN EATING DISORDERS EXPLORING THE PSYCHOPATHOLOGY**

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### **Objectives:**

Patients with eating disorders commonly have increased physical activity and motor restlessness.<sup>1</sup> The aim of this work is to characterize the psychopathology of this behavior, clarifying the differential diagnosis implicated.

### **Methods:**

A semi-structured clinical interview was applied to selected patients with eating disorders admitted in the Department of Psychiatry in Santa Maria Hospital, in Lisbon. A descriptive analysis of motor behavior and the Yale-Brown Obsessive Compulsive Scale were carried out. Finally, the results were compared with the ICD-10 criteria and selected literature.

### **Results**

Frequently, over-exercising is considered “automatic” and not perceived by the individuals. However, multiple similarities between increased physical activity and compulsive behavior were found.

### **Conclusions:**

The psysical activity plays a central role in the development and maintenance of some eating disorders.<sup>2</sup> This work found strong evidence of obsessive-compulsive behaviors associated with increased motor activity, in agreement with the current literature.<sup>3</sup> Poor insight and delusion beliefs can occur, challenging diagnosis and treatment.

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## **PERSONALITY DISORDERS IN ANOREXIA NERVOSA PURGING TYPE**

### **Experience from the Department of Psychiatry in Hospital de Santa Maria**

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#### **Objectives:**

Clinical observation has long suggested a link between personality and eating disorders. Some authors suggest a relationship between Restrictive Type of Anorexia Nervosa and obsessive personality traits and Bulimia Nervosa and impulsive personality traits.<sup>1, 2</sup> The aim of this work is to study Personality Disorders in Eating Disorders, with special attention to Anorexia Nervosa Purging Type patients.

#### **Methods:**

A retrospective statistical analysis of patients with eating disorders admitted in the Department of Psychiatry in Hospital de Santa Maria, in Lisbon, during 2013, was carried out. Eating Disorders and personality disorders were correlated and the results compared with selected literature.

#### **Results**

A total of 46 patients were admitted in the Department of Psychiatry in Hospital de Santa Maria during 2013, diagnosed with an Eating Disorder: Anorexia Nervosa Purging Type (N-15), Anorexia Nervosa Restrictive Type (N-18), Bulimia Nervosa (N-7) and Unspecified Eating Disorder (N-6). In 39% of individuals, a Personality Disorder was diagnosed. The Personality Disorder most commonly encountered in Anorexia Nervosa Purgative Type was Borderline Personality Disorder (47%).

#### **Conclusion:**

There is a high prevalence of Personality Disorders in Eating Disorders. Anorexia Nervosa Purging Type is strongly associated with Borderline Personality Disorder, in agreement with the literature review<sup>3</sup>. The authors discuss the topic and raise questions about the future of the classification of the Eating Disorders.

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## **PATIENTS WITH ANOREXIA NERVOSA: OUTCOME OF INPATIENT CARE**

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**Objectives:** To present and discuss Santa Maria Hospital's Eating Disorders Unit's results of the inpatient treatment program for patients with anorexia nervosa.

**Methods:** review of clinical files of all patients with anorexia nervosa (AN) diagnosis hospitalised at Santa Maria Hospital's Eating Disorders Unit between 1 January 2013 and 31 December 2013 and statistical analysis of data.

**Results:** The sample included 25 patients with AN (17 with AN restricting type and 8 with AN purging type), all female. Mean sample age was 29 years and mean length of stay was 43 days. Mean BMI on admission was 14.1 Kg/m<sup>2</sup> and at discharge was 15.5 Kg/m<sup>2</sup>. 52% patients had a previous inpatient treatment (54% with AN restricting type diagnosis and 46% with AN purging type diagnosis). The most common compensatory behavior was vomiting (88%), and 60% of patients presented at least one medical or psychiatric comorbidity.

**Conclusions:** Although inpatient treatment for patients with AN should be considered only for people whose disorder has not improved with appropriate outpatient treatment, or for whom there is a significant risk of suicide or severe self-harm or whose's disorder is associated with high or moderate physical risk, the results of this study show that inpatient care improves the outcome of patients with severe anorexia nervosa.

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## **LONGTIME COURSE OF ANOREXIA NERVOSA (AN). LONGTIME FOLLOW-UP ON 7.305 TREATED EATING DISORDERED (ED) PATIENTS: THE CHRISTINA-BARZ-STUDY**

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**Aim:** There are numerous follow-up studies on eating disorders, many of which however have serious limitations in design, diagnosis, assessment and number of patients assessed. Major aims of our Christina-Barz-Study was to assess the long-term course of patients with an eating disorder treated as inpatients in very high numbers.

**Method:** The total sample consisted of 7.305 ED-patients, 6.949 female, 356 male; of these 1.693 were treated for AN (30.4 % restricting type), 2.033 for bulimia nervosa (BN), 356 for binge eating disorder (BED), and the rest for ED-NOS. Participation at follow-up was above 70 %. Data were obtained at hospital admission (T1) and at follow-up (T2). Scales used were the Structured Inventory for Anorexic and Bulimic Disorders (SIAB-S), Eating Disorder Inventory (EDI-2), and Brief Symptom Inventory (BSI). Here we focus on AN.

**Results:** Body-Mass-Index BMI increased significantly from T1 to T2, mostly for AN patients with a very long follow-up (FU) interval (ANOVA group x time interaction sign.) and the effect sizes ranged from 2.0 to 2.6. Most EDI-2 subscales (drive for thinness, perfectionism, depression) improved with increasing FU-interval as did BSI-depression. However, crude mortality during the FU-interval was high for AN (5.7 %). The broad data base at T1 allows for detailed multiple regression analyses to identify high risk indicators for unfavourable course. Comparisons between AN, BN and BED will be made.



## GLOBAL APPROACH OF FEEDING BEHAVIOR DISORDERS

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**Introduction:** Disorders of eating behavior can affect all people regardless of socioeconomic or cultural situation. More common in females (90-95 %), has its peak incidence in adolescence. These are processes that can subtly start and go unnoticed at first.

**Objectives:** To analyze the clinical, epidemiological, diagnostic approach of the disorder, evolution and treatment of disordered eating behavior.

**Methods:** Review of the subject and recent articles on eating behavior disorders in Psychiatric guides and magazines.

**Results:** The eating behavior disorders arise as a result of three factors: predisposing, precipitating and perpetuating. We must take into account the genetics and family history, dissatisfaction with body weight resulting in a restriction of diet and multidisciplinary consequences of this disorder (physical, psychological and social) as perpetuating factors. We consider the coexistence of comorbidity between disordered eating behavior and personality disorders, mood disorders (depression) and disorders of impulse control.

**Conclusions:** Eating behavior disorders represent a major health problem that threatens the patient's life. Very important is the rapid detection of the same and the establishment of treatment. Treatment should be multidisciplinary with the patient and family, providing information on the approach to the patient, taking into account the lack of awareness of disease that often exists in patients.

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Crisp, A.H., McClelland, L. Anorexia nervosa. Guidelines for assessment and treatment in primary and secondary care. Psychology Press, 1996

## RESTING STATE FUNCTIONAL CONNECTIVITY IN ADOLESCENTS WITH ANOREXIA NERVOSA

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**Objectives:** A small number of previous studies have investigated Resting-State Functional Connectivity (RSFC) in adults with Anorexia Nervosa (AN) and have shown several functional alterations. The aim of this paper was to investigate whole brain RSFC in adolescents with AN.

**Methods:** twelve right-handed outpatient female adolescents with AN restrictive type (mean age: 15,5; SD 1,7), whose AN had been in progress for less than 6 months and with no other psychiatric disorders, and 12 right-handed, age-matched healthy female adolescents (mean age: 15,9; SD 1,8) were assessed using structural clinical interviews and a battery of self report questionnaires. Functional magnetic resonance imaging scans were obtained from all subjects. Functionally relevant resting state networks (RSNs) were identified using independent component analysis (ICA) and a dual regression technique was used to detect between-group differences in the detected RSNs.

**Results:** Significant between-group differences in the voxel-wise spatial distribution of the functional connectivity maps were found in the executive control network (ECN) ( $p < 0.005$  corrected for FWE). Significantly decreased temporal correlation was observed in AN patients relative to healthy controls between the ECN functional connectivity map in a region of the anterior cingulate and paracingulate gyri. The decreased RSFC found in this region in AN patients were negatively correlated with harm avoidance and body image scores ( $p < 0.05$  uncorrected), and positively correlated with BMI ( $p < 0.05$  uncorrected).

**Conclusions:** Reduced executive function network activity in AN adolescents may be a trait-related biomarker of the disease and could explain the altered cognitive flexibility and decision making processes of these patients in what concerns drive for food and body image perception.

## **FAMILY FUNCTIONING AND QUALITY OF LIFE AMONG FAMILIES IN ANOREXIA NERVOSA: A COMPARISON WITH SUBSTANCE-RELATED DISORDERS AND HEALTHY CONTROLS**

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Dysfunctional patterns of family's response to the illness have been considered maintaining factors in the course of mental illnesses. However, there are few studies that have compared family functioning and quality of life across different psychiatric conditions in adolescence.

### **Objective**

The aim of this study is to examine family functioning of Spanish families of adolescent patients with Anorexia Nervosa (AN) and to compare it with the functioning of families caring for young patients with Substance Related Disorders (SRD) and healthy adolescents.

### **Methods**

A total of 93 caregivers of adolescent patients with AN, 81 caregivers of patients with SRD and 80 caregivers of healthy adolescents were compared using a battery of assessment scales examining family functioning and quality of life. The association of family functioning with symptom severity and comorbid depression of the patients was also assessed. The Schedule for Affective Disorders and Schizophrenia for School-Age Children (K-SADS) was used as a clinical interview for each patient and controls. Families' Expressed Emotion was assessed by the "Family Questionnaire" (FQ), symptom accommodation by the "Accommodation and Enabling Scale for Eating Disorders" (AESED) or the "Accommodation and Enabling Scale for Substance Abuse" (AESSA), caregiving experience by the "Experience of Caregiving Inventory" (ECI) and quality of life by the "SF-36".

### **Results**

Results showed that various domains of family functioning were differentially affected among families of the AN group and the SRD group. Differences between mothers and fathers in family functioning were also observed. Lastly, families of healthy children exhibited lower scores in all the scales.

### **Conclusions**

In conclusion, characteristic symptoms of each disorder may be associated with differential patterns of family functioning and may require specifically tailored psychoeducational interventions.

## **HYONATREMIA AND CHEWING GUM IN A PATIENT WITH ANOREXIA NERVOSA**

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### **INTRODUCTION**

Anorexia Nervosa (AN), is the second in prevalence of the eating disorders. As a subtype, Anorexia Nervosa binge-eating/purging, apart from dieting, fasting or excessive exercise, is characterized by recurring episodes of binge eating or purging, such as use of diuretics or laxatives. Chewing is also common between patients with ED, which contains some ingredients with diuretic and laxative properties as mannitol, xylitol or sorbitol, apart from being anisolytic and anorexigen, that can lead in hydroelectrolitical disturbances. Hyponatremia, caused mainly by dehydration (hypovolemic hyponatremia), is one of these.

### **CASE REPORT**

Here is the case of a woman 23 years old who was diagnosed of Anorexia Nervosa binge-eating/purgative since she was 17. As purging method, during a period of time, she used to intake (swallowed) several amount of chewing gums (up to 150 per day), until in a control analysis we found a sodium level of 123 mEq/L in the absence of other purging methods (as diuretics, laxatives or vomits) or compulsive intake of water. One of the components of the chewing-gum she consumed was mannitol; this polyalcohol, which is use as sweetener, is known to cause hyponatremia when it is intook in sufficient account.

### **CONCLUSION**

The goal of presenting this document is the review of the medical effects of chewing in patients with eating disorders, and show it as a rare cause but possible of hyponatremia based in a case report.

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## **EVALUATION OF FOOD INTAKE OF OBESE PATIENTS WITH BINGE EATING DISORDER SUBJECT TO COMBINED TREATMENT OF COGNITIVE-BEHAVIORAL THERAPY AND TOPIRAMATE OR PLACEBO**

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Few studies have examined changes in total caloric intake and diet composition of obese patients with Binge Eating Disorder (BED) undergoing some form of treatment.

**Objective:** To characterize the dietary patterns and assess changes in eating behavior and nutritional status after an intervention that combines cognitive - behavioral therapy (CBT) to topiramate or placebo.

**Method:** This study involved a sub-sample of 38 adult obese women with BED (DSM – IV criteria) that participated in a double-blind, randomized, placebo-controlled trial for 21 weeks. Body Mass Index (kg/m<sup>2</sup>), waist circumference (cm), measures of food intake (calories, macronutrients) and frequency of binge eating episodes (BEE) - number of days per week – evaluated in the initial and final study visit. The statistical analysis was based on intention to treat analysis using the last observation carried forward as the final measure.

**Results:** After the intervention, there was a significant reduction of total caloric intake ( $p < 0,001$ ) though without differences between treatment groups. Only the drug group showed significant increase in protein intake ( $p < 0,001$ ) and reduced lipid intake ( $p = 0,023$ ) along the treatment. No changes in total energy and macronutrient intake occurred during the BEE, only a reduction in the proportion of carbohydrate intake ( $p = 0,046$ ) in the drug group. Decreases ( $p < 0,001$ ) in Body Mass Index and Waist Circumference were obtained only in the drug group.

**Conclusions:** The CBT favored the reduction of the total caloric intake and remission of episodes regardless of the pharmacological combination. There was a slight improvement in diet macronutrient distribution along the treatment only in the topiramate group. The impact on nutritional indicators was also larger in this group. The association of a specific nutritional intervention may contribute to the achievement of more expressive qualitative changes in food intake.

## SYSTEMATIC REVIEW OF THE DIAGNOSTIC CATEGORY MUSCLE DYSMORPHIA

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**Objectives:** 1. To collect, analyze and synthesize the evidence on muscle dysmorphia (MD) diagnosis as defined by Pope et al (1997); 2. To discuss its appropriate nosology and inclusion as a specific category in future editions of psychiatric classificatory systems.

**Methods:** A systematic search in MEDLINE, PsycNET, EMBASE, LILACS and SciELO databases and in the International Journal of Eating Disorders was conducted looking for articles published between January/1997 and December/2011, followed by an update in MEDLINE (up to August/2013). Only epidemiological and analytical studies were considered for selection. The methodological quality of included studies was assessed according to the *Evidence-Based Mental Health* and the *National Health and Medical Research Council's* guidelines. The support for inclusion of MD in psychiatric classificatory systems was examined against Blashfield et al's criteria (1990).

**Results:** Twenty-seven articles were considered eligible out of 4152. Most of the studies were cross-sectional and enrolled small, non-clinical samples. The methodological quality of all selected papers was graded at the lowest hierarchical level due to studies' designs. Forty-one percent of the publications considered the available evidence insufficient to support the inclusion of MD in any existing category of psychiatric disorders. The current literature does not fulfill Blashfield et al's criteria for the inclusion of MD as a specific entity in psychiatric diagnostic manuals.

**Conclusions:** The current evidence does not ensure the validity, clinical utility, nosological classification and inclusion of MD as a new disorder in classificatory systems of mental disorders.

## **FOOD CRAVING IN MORBID OBESE PATIENTS UNDERGOING BARIATRIC SURGERY**

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It has been suggested that some obese patients could be suffering food addiction, which closely resembles drug addiction. Thus, the possibility exists that high scores in tests related to food craving could predict poor outcomes of treatments such as bariatric surgery. In the BARIFIS study we are comparing morbid obese patients (body mass index, BMI > 40) with different scores in the FCQT-PC food craving questionnaire to test this hypothesis and find out biomarkers that could be related to the observed differences. Up to the date, we have selected twenty two patients of both sexes that were initially divided into two subgroups: one scoring below 15 in the FCQT-PC test (considered low craving, LC) and the other with higher scores (high craving, HC). The same number of normoweight controls was also recruited for comparisons. Patients underwent bariatric surgery and the results of treatment were assessed after one year of follow-up. Here we report the effects of surgery on BMI, food craving and serum levels of IL-6 and pleiotrophin, two selected biomarkers that have been associated to different comorbidities in obesity. At the onset of the study, obese patients exhibited higher craving scores and higher levels of IL-6 than controls, and also tended to have higher levels of PTN (not reaching however significant differences). One year after surgery, BMI and craving scores were clearly and significantly reduced; on the contrary, IL-6 reductions were only slight and this cytokine remained elevated, as it happened with PTN. LC and HC subjects behaved similarly in all senses with the exception of IL-6 response, which tended to be better in HC subjects. It seems therefore that bariatric surgery has positive effects on BMI and food craving which are not clearly related to the initial scores in the FCQT-PC test.

## EATING BEHAVIOR AMONG CHILDREN AND ADOLESCENTS WITH DIABETES TYPE I

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**Objectives.** Disturbed eating behavior is relatively common in children and adolescents with type-1 diabetes. Food restriction and excessive preoccupation with weight are often associated with diabetes treatment and play an important role in the etiopathogenesis of eating disorders (ED). The purpose of this study was to assess eating behavior among children and adolescents with type-1 diabetes.

**Methods.** 124 patients (54% females) between 8 and 16 years old ( $13,10 \pm 2,4$ ), who attended outpatient pediatric endocrinology clinics, were evaluated by the following instruments: Development and Well-Being Assessment (DAWBA); Children Eating Disorders Examination (ChEDE); Childhood Depression Inventory (CDI); Body Image Questionnaire (BSQ). Anthropometric parameters and glycosylated hemoglobin were also measured. Mann-Whitney tests compared continuous measures and Pearson Chi-Square categorical measures.

**Results.** 63.7% of participants were within the normal weight range; however, 63.9% had abnormal glycosylated hemoglobin levels ( $9.83 \pm 2.7$ ). Based on DAWBA, 10.5% of female participants met diagnosis for an ED, as opposed to none of the male participants ( $p = 0.01$ ). In addition, the ChEDE body weight concern subscale scores were different between genders ( $p = 0.02$ ), although considered within limits found in general population. Importantly, 29.7% of participants demonstrated significant symptoms of depression per the CDI (scored  $\geq 16$ ). Student t test compared the male and the female groups: 13% of the female participants demonstrated body dissatisfaction (scores  $> 110$ ) on the BSQ, which was significantly different from the male group ( $p = 0.01$ ).

**Conclusions.** Significant eating disturbances, including ED, are more prevalent in this female population than in the general one. We also observed that a large number of participants have significant depressive symptoms, particularly those with high risk for ED. Our findings suggest the need for screening ED symptoms in this population, as well as appropriate intervention considering its potential impact in treatment.



## **THE ALIMENTARY DISTURBANCE AND THE OBESITY IN WOMEN OF REPRODUCTIVE AGE IN CONTEMPORARY PERSPECTIVE AND INTERDISCIPLINARY DISCUSSION**

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This study aims to think about obesity, especially in women of reproductive age, in the light of the psychoanalytic theory, focusing it as a current mounting epidemic, although it has an ancient history.

**Objectives:** analyze subjective aspects of eating habits in women of reproductive age living with obesity and chronic symptoms linked to metabolic syndrome.

**Methods:** Clinical and qualitative (exploratory, non-experimental) study with a small purposive sample of twelve women undergoing treatment in a health unit in northern Paraná, Brazil. The sample was closed when data saturation occurred. The focus groups were audio recorded and transcribed, becoming the statements into categories of analysis. The categorization of the discourse was developed through content analysis.

**Results:** The categories that emerged were: negative feelings (stress, depression and anxiety - like comfort food), interpersonal (lack of support from family - using food), compared with the body (dissatisfaction) and social vision (the butt of jokes and negative comments for not having the body considered standard). The psychodynamic approach provided a theoretical framework supplemented by social psychology. The results show how women involved in dealing with perceptions that a body 'out of measure' causes them and how their self-evaluation is guided by the socio-cultural view of the thin body as opposed to the act to eat a form representing to fill the feeling of inner emptiness.

**Conclusions** This is a contribution of an interdisciplinary approach that values listening subjectivity during treatment.

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## **EATING DISORDERS DIAGNOSTIC CROSSOVER AND REMISSION: EVALUATION OF A CLINICAL SAMPLE AT FOLLOW-UP**

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**Introduction:** The migration of an eating disorder (ED) is a phenomenon often observed in clinical practice, but longitudinal studies of clinical course have shown distinct results. None have been conducted in Latin population.

**Objective:** To examine the course of ED diagnosis in a sample treated in a specialized clinic.

**Methods:** Individuals (n=101) seeking treatment between October/2006 and December/2010 were evaluated 2-3 years (group 1; n=64) or 4-5 years (group 2; n=37) after the onset of treatment. The follow-up interviews involved clinical and sociodemographic data collection, as well as information on eating psychopathology in order to establish ED diagnosis based on DSM-IV-TR. The migration, remission or stability of ED diagnostic categories was analyzed in relation to changes from admission to treatment and the follow-up interview, and from the onset of the ED and the follow-up interview.

**Results:** Considering findings of the two analyses combined, similar results were found for migration (42-45%), stability (around 26%) and remission (around 30%) of ED categories for the complete group and follow-up period. The highest proportion of migration observed in individuals with anorexia nervosa (AN), bulimia nervosa (BN) and binge eating disorder (BED) was towards “eating disorder not otherwise specified” (EDNOS) (about 45% for each category). The highest remission rate was observed among patients with AN – greater than BN (52.38% vs. 13.51%, p=0.001) – followed by EDNOS, also higher than those with BN (42.85% vs. 13.51%, p=0.001), both in relation to changes in diagnosis since admission to treatment.

**Discussion:** The crossover of ED diagnosis in this study was high when all diagnostic categories and period (over 2-5 years) is considered, but migration between the full ED syndromes was relatively low and for the most times occurred towards EDNOS diagnosis (partial syndrome). Our data suggest good outcome for AN, less favorable results for BN, while BED and EDNOS showed intermediate outcomes. These findings suggest distinct course patterns among the major diagnostic categories of ED.

**Conclusion:** Based on differences found in clinical course, our findings support the distinction between AN, BN and BED considering DSM-IV-TR diagnostic criteria.

## **BODY IMAGE, LIFESTYLE AND INFLUENCE OF AESTHETIC MODELS IN OBESE MEXICAN ADULTS.**

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**Introduction:** In current society, body culture emerges as one of the main beauty factors. Body image is a mental picture of the body, with perceptual and affective components. Obesity impacts negatively on the perception of body image and influence of aesthetic models in this population.

**Objective:** Describe the association of body image and aesthetic models in obese adults.

**Material and methods:** Cross-sectional study of patients from a Bariatric Clinic. Participants were consecutively recruited from May to September 2009. Anthropometric evaluation was performed. The CIMEC questionnaire, Body Shape Questionnaire and Body Image Questionnaire were applied.

**Results:** Sample 205 obese patients; mean age  $43.9.8 \pm 12.7$  years, 77.8% women. Mean weight  $88.3 \pm 14.6$ . Body Mass Index (BMI)  $34.4 \pm 4.3$ . Smoking history, 38.9%. Alcohol consumption 51%, higher in females ( $p < .001$ ). Inverse association between number of meals and BMI ( $p < .006$ ). History of failed diets, (83.3%). Weight concern found in 33.3%. Influence of publicity, 23.6 %, Social influence 27.8%. Mild body dissatisfaction 13.9%, moderate 61.1%, and severe 20.8 %, Body distortion mild 36.1%, moderate 34.7%, severe 23.6%. Type I Obesity in 29.97%, type II 10.97%, type III 3.65%. Women had greater body dissatisfaction ( $p = .032$ ) and influence of advertising ( $p = .003$ ) than men.

**Discussion/Conclusions:** High frequency of smoking and alcohol consumption, associated with sedentary lifestyle and decrease in number of meals per day were found. Third of sample had insomnia, which has been associated with weight gain. 72.2% had body dissatisfaction, describing themselves thinner according to its real image.

### **Bibliography:**

- Puhl R, Brownell K. Psychosocial origins of obesity stigma: toward changing a powerful and pervasive bias. *International Association for the Study of Obesity, Obes Rev* 2003; 4:213-27.
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## **DROP-OUT in EATING DISORDER: A ROLE FOR PERSONALITY DISORDER?**

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**Objective:** The *dropout* phenomenon is very common among persons affected by Eating disorders (ED) and ranges between 29 and 73%<sup>1</sup> representing a strong limit for patients treatment and scientific research. The aim of this research is to identify clinic and socio-demographic features connected with high *dropout* rate in ED patients, in particular those with Axis II comorbidity who are even more likely to have poor therapeutic alliance and treatment adherence.

**Method:** Participants were 93 patients referred to our department over a 1 year period. The sample was divided in completers (CO) and dropouts (DO). Based on dropout timing, we distinguished Failure in Alliance (FA) and Failure in Treatment (FT). The patients were evaluated through clinical interview and some specific tests for ED. We used the Chi-Square Test for comparison of dichotomous variables, the T-Student for continuous ones and the Logistic Regression to calculate Odds Ratio (OR).

**Results:** the percentage of DO is 50%; the recent practice of self-induced vomiting ( $p=0.009$ ) is associated to dropout whereas the comorbidity with Cluster A and Cluster C Disorders is protective from dropout OR (95%CI): 0.18(0.05-0.62); 0.13 (0.04-0.45) respectively. Moreover, the diagnosis of Bulimia (0.028) in comorbidity with Borderline PD (0.012) is associated with Failure in Treatment, such as the presence of Dependent Personality Disorder; young age seems to predispose to the Failure in Alliance (FA) ( $p=0.009$ ).

**Conclusions:** the most surprising result of our research is the protective role of Cluster A and C from dropout probably related to the influence of psychopathological characteristics on the therapeutic alliance. Polarization of therapeutic efforts might improve the adherence to the treatment.

<sup>1</sup> Fassino, S. et al.,2009

## **EATING DISORDERS AND THE TOMATIS APPROACH**

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### **OBJECTIVE**

The aim of the study is to investigate psycho-phonological differences between patients affected by Anorexia nervosa (AN), Eating Disorders not otherwise specified (ED-NOS) and healthy controls. The hearing process doesn't engage consciousness whereas listening involves a voluntary act. The Tomatis approach investigates the psychosomatic and psychological features of people as measured by an audiogram, the Tomatis Listening Test (TLT). A frequency generator machine emitting pure sounds scaled from 125 to 8000 Hz is used to obtain graphs showing 2 curves (the air- and the bone-conduction curve).

Comparing the air and the bone conduction listening curves, the TLT provides information on narcissistic traits, relationships withdrawal, reduced self-esteem. Further the TLT gives a measure called 'selectivity' which is the ability to discriminate low and high sounds. The selectivity is closed when the subject fails and sounds are perceived in a blurred way.

### **METHODS**

9 patients affected by AN, 4 by ED-NOS and 29 healthy controls aged 18-45 years were administered the TLT.

### **RESULTS**

75% of the cases compared to 46.7% of the controls ( $p=0.096$ ) show a scotoma in the 1000Hz frequency on the air conduction curve. Accordingly to Tomatis, this frequency is related to the stomach. No association ( $p=0.804$ ) were observed on the bone conduction curve (usually associated to back pain or posture problems).

Selectivity is closed in the 81.3% of the cases compared to the 50% of the controls ( $p=0.098$ ) on the left ear curve whereas no association are observed on the right one. Since the left ear represents the relationship with the mother, a left ear selectivity closure means that the subject cannot or would not listen to his/her mother properly.

### **CONCLUSION**

The Tomatis method is a valid complementary tool in approaching ED; further research is needed to investigate its potential diagnostic and therapeutic role.

## **ADDICTIVE DIMENSION OF EATING DISORDERS AFFECTING DROPOUT: PSYCHOLOGICAL MEANINGS**

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**Objectives:** The present study aims to analyze the addictive dimension of Eating Disorders (ED) highlighted in qualitative studies results about the meanings of outpatients' treatment dropout. This is the clipping of analysis categories revealed by research conducted investigating adults who dropped specializing treatment outpatient in ED.

**Methods:** It was conducted a qualitative study adopting the clinical-qualitative approach that consists of a variant of qualitative research applied to Health area which addresses questions about the health-disease process. The sample, set according to data saturation criteria, consisted of eight in depth interviews.

**Results:** The category "*Enslavement to addiction (compulsively)*" - *addictive dimension of anorexia and bulimia* found as central among others related: "*Anorexia is for life*" - *attachment/adherence to the symptom*, and "*I do not like if things get out of my control*" - *dropout as relief* points clinical elements from the experience of the disorders in psychological meanings assigned to dropout by patients. Findings discussed under the theoretical framework of psychodynamic approach from anorexia and bulimia described as addictions, as well as under the scope of the current literature review about eating issues and addictive disorders can contribute to refine the treatment approach of ED and also to understand them in their addictive dimension in order to compliance and retention in treatment.

**Conclusions:** The symbolic elements revealed by findings from addictive experience by patients may contribute to support the discussion of Eating Disorders as "Addictive Disorders" due to the convergent psychodynamic beyond the 'addiction model of eating disorders' as a physiological model of 'addictive' or 'toxic' food dependence.

**THE COMPLETE TITLE SHOULD BE CAPITALIZED, IN THE LEFT OF THE PAGE IN TIMES NEW ROMAN FONT, 14 POINT. TITLE SHOULD BE BRIEF AND CLEARLY INDICATE THE CONTENT**

B. Smith<sup>1</sup>, D. Jones<sup>1</sup>, R. Andrews<sup>1,2</sup>

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Authors: (times new roman size 10 point, left) Initials and Surnames for every author must be provided. Do not include degrees or titles. The name of the presenting author should be underlined. An author's name appearing on more than one abstract must be identical in each case.

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Text: Abstract text must be in Times New Roman font, 12 point size, single space and justified..It should **not exceed 300 words** includes tables which must be in text format, not graphic format). Abstracts will be reproduced exactly as submitted and will not be edited in any way. Abbreviations should be kept to a minimum. Use standard abbreviations generic drug names. Place unusual abbreviations or acronyms in parentheses after first use. Do NOT identify author(s) or institution(s) in text..

Make the abstract as informative as possible. Conclusions must be supported by data. Organise the body of the abstract as follows:

**Objectives**

**Methods**

**Results**

**Conclusions.**

## EVALUATION OF WAYS FOR TREATMENT OF NIGHT EATING SYNDROME

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**Objective.** The evaluation the efficacy of different ways of night eating syndrome (NES) treatment.

**Methods.** A randomized sample of patients (N=98, age 26-65) with NES and co-morbid depression according to the diagnostic criteria (DSM-V, Night Eating Questionnaire (NEQ), HAM-D 16,31±1,22) was observed. The sample was divided in two groups according to the prevalence of evening or nights eating. "Evening eating" (N=58) group had episodes of taking food after dinner, but before going to sleep more than 4 times a week. They had less than 2 night eating episodes a week. The "night eating" group (N=40) had more than 4 episodes of night eating after going to sleep, and didn't usually eat in the evening (less than 2 episodes a week). Both groups were randomly divided into three treatment groups: first group was prescribed Sertraline (50-100 mg), second group was prescribed Agomelatine (25-50mg) and third group had 10 standard psychotherapy sessions. The sample was observed before treatment (D0) and after 2 months (D60).

### Results

	Evening		
	Sertraline	Agomelatine	Psychotherapy
N	21	19	18
NEQ_D0	34,17±1,08	32,52±0,87	31,52±0,93
NEQ_D60	21,33±0,97*	27,81±1,07*#	20,43±0,85*
Night			
N	16	13	11
NEQ_D0	39,03±0,96	38,42±1,04	39,22±1,03
NEQ_D60	29,42±1,01*	23,16±1,32*#	30,32±1,12*

\*- p<0,05 compared to D0

# - p<0,05 compared to Psychotherapy

The overall score of NEQ was significantly lower (p<0,05) on D60 in all the observed groups. But the NEQ score of patients with "evening eating", who took Sertraline is lower (p<0,05) than in those, who received Agomelatine. In patients, who had "night eating": those who took Agomelatine appear to have lower scores (p<0,05) on D60 compared to Sertraline and psychotherapy.

**Conclusions.** Patients with evening eating treatment It is possible to conclude that prescribing Sertraline and conducting psychotherapy was more effective in NES treatment for patients with "evening eating", and prescribing Agomelatine – in patients with "night eating".



## **WPA-0037 EATING DISORDERS DURING ADOLESCENCE : THE ADJUSTEMENT OF THE PSYCHOANALYTICAL APPROACH FOR AN INTERDISCIPLINARY TREATMENT**

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In a psychodynamic approach, we understand the defensive meaning of the anorectic and bulimic conduct, and its value, as a reorganizing of objectal relations: difficulties in investing, antagonism between the objectal inclination of these patients and the need to protect their narcissistic balance. The avoidance of depression lianed to a compensatory juxtaposed narcissistic shema must be appreciated in order to understand the developing risks in these behaviours.

The psychopathological significance of these conducts, its stakes, and its therapeutical consequences are discussed.

## **WPA-0171 ALIMENTARY BEHAVIOUR DISORDERS AT HIGHLANDS OF PERÚ (3242 M.A.S.L.)**

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<sup>1</sup>*Psychiatry, EsSalud, Lima, Peru*

**Objectives :** The prevalence of eating behavior disorders (EBD ) has not yet been documented in the city of Huancayo, in central Peru, at 3271 meters above sea level. The aim of this study is to describe cases in the city of Huancayo.

**Methods :** Were reviewed clínicas stories of patients treated at the Hospital Regional IV Huancayo, in the service of psychiatry from 2004 to 2008 . Data were statistically analyzed.

**Results :** The patients enrolled were female . It was observed that the cases began to register at the hospital since 2004, with a prevalence of bulimia and as the years passed , until 2008 , rose to predominance of anorexia nervosa. The patients had comorbid mood in 15% of cases for both anorexia and bulimia. About anorexia nervosa can be found a mean age of 15.5 years. The average body mass index (BMI) was 15.83 . 90 % of patients was natural and from Huancayo , migration or change sinregistrar city. Only 1 patient was from Satipo . 50 % had binge eating and psychopathology in restrictive behaviors . About Bulimia Nervosa The mean age was 18.5 years . His BMI was 19.4 . The 100 % natural was resgistrarse Huancayo without migration. The characteristic were binge eating .

**Conclusions :** During the period 2004-2008 there was an increase of patients with eating disorders in the city of Huancayo to prevalence of anorexia nervosa . By hypothesis we can infer that this increase is due to youth access to media, as well as population growth and changing consumption habits of the population.

### **References :**

1. Gonzales GF: Metabolismo en las grandes alturas. Acta Andina 2001; 9 (1-2): 31-42.
2. Debra L. Franko, Ph.D et col: A Longitudinal Investigation of Mortality in Anorexia Nervosa and Bulimia Nervosa. Am J Psychiatry 2013;170:917-925.

## **WPA-0249 IMPLEMENTING AN EATING DISORDERS TRAINING PROGRAM FOR PRIMARY HEALTH CARE PROFESSIONALS: THE CANADIAN EXPERIENCE**

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**Objectives:** The objective of this presentation is to present findings emanating from the evaluation of an Eating Disorders training program. Eating disorders incur important costs to health care system. Anorexia Nervosa has the largest mortality rate of any major psychiatric condition (Sullivan, 2002). Primary health care professionals are uniquely positioned to contribute to the delivery of prompt assessment and treatment to individuals with eating disorders. However, they often lack the knowledge, skills, and confidence to effectively do so. To respond to this knowledge-to-practice gap, the Douglas Mental Health Institute Eating Disorders Team developed and implemented an evidence-based training program for primary health care professionals based on an interactive learning approach with continual feedback, supervision and coaching.

**Methods:** In all 10 focus groups were conducted with primary care staff in 10 community health centres. Questions were around staff appreciation of the training, the development of collaborative care, and the impact of the training on services.

**Results:** Findings around staff appreciation of the training, areas of satisfaction/dissatisfaction and the impact of the training on knowledge translation will be presented.

**Conclusions:** Results from this innovative Eating Disorders Training Program have important implications for the dissemination of best practices and evidence based knowledge translation for primary health care professionals. This training program may be replicated in other communities across and elsewhere.

### **References:**

Sullivan, P. (2002). Course and Outcome of Anorexia Nervosa and Bulimia Nervosa. In Fairburn, C.G. & Brownell, K.D. (Eds.) *Eating Disorders and Obesity* (pp 226-232). New York. NY: Guildord.

## COMPLICATIONS OF EATING DISORDERS. IMAGE GUIDE

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**Objectives:** The principal aim of this article is to compile the main complications of eating disorders and create an image guide that can help us diagnose hidden eating disorders. Images were obtained of patients treated in our hospital.

**Methods:** Analyse and show different images of complications of eating disorders. The images shown were taken from 7 different patients and after taken as an example for main complications of eating disorders. Main complications were established by a bibliographic search in PubMed.

**Results:** The main complications of eating disorders have a representative image (radiological, real image..).

**Conclusions:** Eating disorders are a challenge for health professionals, with many patients receiving ineffective care due to underdiagnosis. The incidence of eating disorders is increasing worldwide, most often affect young patients, with important long term complications.

The complications of long term malnutrition manifest in almost every organ of the human body. Many of them can be detected with an exhaustive physical exam however in this case eating disorders might be very evolutionated in time.

Musculoskeletal complications including osteoporosis resulting in an important number of insufficiency fractures, with long-term implications for bone health and growth.

Gastrointestinal complications are numerous and in some cases may result in fatal outcomes after acute gastric dilatation and rupture subsequent to binge eating. In patients with severely disordered eating, marked derangement of electrolyte levels may result in refeeding syndrome. Radiological, exhaustive observation and analytic findings might play an important role in diagnosing a hidden eating disorder.

## **NO EFFECT OF INCREASE IN BODY MASS INDEX ON CARDIAC ABNORMALITIES IN ANOREXIA NERVOSA INPATIENTS - A PRELIMINARY STUDY**

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### **Objective**

Anorexia nervosa (AN) is a life-threatening condition, with significant risk of death due to cardiac abnormalities. The objective of this study was to investigate for QT interval or heart rate (HR) abnormalities in AN patients and any correlation between BMI, HR and QT interval at baseline and at completion of treatment.

### **Method**

21 patients (20 females, 1 male) aged 16 to 43 years with a diagnosis of AN were retrospectively analyzed from January 2012 to January 2014. An ECG, biochemical tests, BMI and clinical assessment were performed on admission. ECG and BMI were also repeated at discharge.

### **Results**

Smirnov-Kolmogorov test was used to analyse data distribution. The Wilcoxon signed-rank test was used to compare two sets of scores that come from the same participants on both admission and discharge. The mean baseline BMI was 14.4 +/- 5 kg/m<sup>2</sup>, baseline HR was 58.1 +/- 20 bpm and QT interval 425.8 +/- 44 ms. At discharge, mean BMI was 18.8 kg/m<sup>2</sup>, HR was 70.3 +/- 14 bpm and QT interval 392.2 +/- 41. The mean QT interval was decreased by 15 ms and the HR increased by 5 beats/min. A Wilcoxon test showed that the treatment course did not elicit a statistically significant change in HR score in individuals with AN. (Z=-1.17, p=0.087). Spearman analyses showed statistically significant correlations between the following variables: QT baseline and HR baseline (r=-0.78; p=0.000); QT discharge and HR discharge (r=-0.83; p=0.000), and Mg and HR baseline (r=-0.64; p=0.004). Interestingly, no statistically significant correlations were observed between BMI and QT, and subsequently BMI and HR score at baseline and at completion of treatment.

### **Conclusion**

Further exploration is needed in a larger population to investigate for aetiology and medical management of cardiac abnormalities in AN.

## **SEGUIMIENTO DE PACIENTES CON DIAGNÓSTICO DE TRASTORNOS ALIMENTARIOS ATENDIDOS EN UNA UNIDAD MULTIDISCIPLINARIA**

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Valentina Ulloa Jiménez, psicóloga, Universidad Adolfo Ibáñez, facultad de Psicología, Santiago de Chile.

### **Introducción:**

El proceso de recuperación de las pacientes con Trastornos alimentarios tiende a ser un fenómeno complejo y pobremente entendido (Federici & Kaplan, 2008). Estos pacientes presentan “resistencia al cambio” y conductas ambivalentes; no sienten necesidad de tratamiento por la naturaleza egosintónica. Al ocultar o no conocer sus síntomas, provocan un retraso de unos 5 a 6 años entre el inicio del trastorno y la búsqueda de ayuda.

### **Objetivo:**

Realizar un seguimiento del proceso terapéutico de pacientes que ingresan a una unidad multidisciplinaria especializada en trastornos alimentarios.

### **Método:**

Se realizó la revisión de fichas clínicas consignando puntaje EAT-26 de ingreso, diagnóstico, datos sociodemográficos, tiempo de evolución de la enfermedad, número y tipo de intervenciones realizadas (consultas con psiquiatra, con nutrióloga y con psicóloga), tratamiento farmacológico. Además, se realizó una reevaluación utilizando el EAT-26 consignando el puntaje actual.

### **Resultados y conclusiones:**

Se evaluaron 25 pacientes, entre 13 y 36 años de edad, 22 mujeres y 3 hombres. La mayor parte eran estudiantes (14) y solteros(as) 22; 11 viven con ambos padres y 9 además con hermanos, el IMC inicial fluctuaba entre los 17,6 y los 37,6. La mayor parte recibe tratamiento farmacológico (23) y los más frecuentes son sertralina (6), fluoxetina (6) y quetiapina (4) y lamotrigina (4). Al menos una vez, 23 han consultado al psiquiatra, 22 al psicólogo, 19 a nutriólogo, 2 al neurólogo y 6 a otro profesional médico. La mayor frecuencia de consultas es a psicólogo y/o psiquiatra.



Topic

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# Ecology, Psychiatry and Mental Health

abstracts - volume 2

## **SOCIAL REPRESENTATIONS OF MENTAL ILLNESS – A QUALITATIVE STUDY WITH MENTAL HEALTH PROFESSIONALS**

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**Objectives:** The present work aims to acknowledge the social representations about mental illness of Psychiatrists, Psychiatrist Interns, Child Psychiatrists and Clinical Psychologists. Four dimensions were considered: (1) conceptual - concepts about health and mental illness; (2) descriptive – mental illness causes; (3) intervention – models for clinical intervention and clinical procedures; and (4) context – influence of the context in clinical procedures.

**Methods:** A qualitative exploratory study was developed based, epistemologically, on social constructionism and social representations. Through the course of the research 30 semi-structured interviews were conducted (13 psychologists, 10 psychiatrists, 5 Internal Psychiatry and 2 child psychiatrists). A content analysis of the interviews was performed with NVivo 10.

**Results:** Results showed that the social representations of mental illness are heterogeneous. Mental health is conceptualized as flexibility, adaptation, functionality and the biopsychosocial well-being of the individual. The causality of mental illness is explained by the interactionist biopsychosocial model. Professionals mainly adopt eclectic intervention models and strategies in their clinical practice. Participants refer that their goals are to promote the well-being, diminish the suffering and promote the functioning, the autonomy and “cure”. Participants said that the public institutional framework compromises their flexibility in clinical procedures. Private practices, on the other and, are seen as increasing the procedural possibilities of the professionals.

**Conclusions:** Individual analysis (dispositional) of the pathological behavior is privileged in detriment of the contextual analysis (situational). Implications of this study to the theoretical framework of social representations of mental illness are considered.



## **MENTAL HEALTH OF FOREIGN RESIDENTS IN JAPAN: A LITERATURE REVIEW**

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### **Objectives**

This presentation will address mental health of foreign residents in Japan. Japan is an island country and its unique culture and language have developed originally. Nevertheless, number of foreign residents in Japan has increased gradually and reached 2.21 million, 1.74% of total population in 2008. It is required to provide mental health service for those foreign residents considering difference of ethnic, language and cultures.

### **Methods**

Literature review of selected research studies focusing on foreign residents in Japan. Japanese medical reference database "Ichushi web" ran by Japan Medical Abstracts Society was used with "foreigner", "foreign residents in Japan", "psycho" and "mental health" as keywords through literature published since 2000 to 2010. Demographic data, citizenship, psychotic symptom, diagnosis and behavioral problem were picked up as trait and mental health status and analyzed.

### **Results**

Subjects were selected 46 research studies. Nationalities of these foreign residents were China, Brazil, Philippine, Korea, Peru, USA and so on. Reported symptoms and problematic behaviour were losing appetite, sleep disorder, headache, irritation, irascibility, anxiety, depression, auditory hallucination, delusion of observation post partum, suicide committee, substance abuse and etc. Their diagnoses were anxiety disorder, mood disorder, major depression, adjustment disorder, somatoform disorder, suspicious PTSD, reactive psychosis, schizophrenia and so on. Some case of females showed symptom post partum and they committed murder or arson consequently. Another female case had a dementia after a big earthquake.

### **Conclusions.**

Nationality of foreign residents was various so multi language services are required and cultural consideration is required for service providers. Especially for female residents around the partum as a critical life event, not only mental health service but also comprehensive medical and social supports are needed. In Japan, there are many earthquakes that become a trigger for mental health problem, so resilience as personal trait and community's strength to be improved.

## **WHEN THE INDIVIDUAL DISSAPEARS IN THE EYES OF THE PSHYCHIATRIST AND PHYCHOLOGIST**

F. Caballero

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Human clinics goes between relationships in which is questioned his exercise and that does not mean, weakness but also the difficulty to capture the changeability from the human individual. When a person inserts himself in the structure from the psychiatrists and psychology speech, this person might disappear and because of that reason the subject is more important in spite off the tools that uses the professional. The Pshychiatrists will look forward in his speech in finding the organics origin for the illness to go through later to the medication. To the same extent we find it in the Phychologist word. The Phychologist after gained basic information from the patient using psychometrics tests he will proceed. On a research done in Pschychiatrics Hospital taken place in Valencia-Venezuela based in “Phychiatrics essays”, and the observation from the “Clinical magazine” in emergency room. It uses as point of reference the phychologist behavior made by students in his practices. The final results shows that pshychiatrics works looks forward the uses of the medication and in the phychologist labor uses the tests for treat the patient. In both speeches we see lack of flexibility in working with the subject and because of it the individual disappears. To conclude, it is outstanding to open an speech about the pshychiatrist and pshychologist work with hospital patients.

## **SEXUAL ABUSE OF MALES: INDIVIDUAL, FAMILY, PEER & SOCIOCULTURAL INFLUENCES ON MENTAL HEALTH OUTCOMES**

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**Introduction:** Sexual abuse of males is common. Despite the increased attention to sexual abuse by researchers, clinicians and in the public male victims of sexual abuse remain significantly less likely to self-disclose, less likely to seek help and be suspected as a victim, less likely to be believed upon disclosure, more likely to be blamed, and more likely to be perceived negatively when they do disclose. While there is a wide body of literature examining the behavioral, emotional, and social consequences associated with being sexually abused, comparatively few studies have focused on males. As prevention and intervention efforts for men and boys are developed, it is critical to consider sexual abuse victimization and the multidimensional processes that promote and inhibit resilient mental health outcomes.

**Methods/Objectives:** Drawing extensively from existing research, this critical review: (1) examines the nature, experience and impact of sexual abuse victimization for males; (2) identifies key multilevel risk and protective factors influencing the nature, experience and impact of sexual abuse for males; and (3) offers specific recommendations and future directions for clinicians and researchers.

**Results/Conclusions:** It is crucial that clinicians and researchers incorporate a developmentally and contextually sensitive focus on the nature, experience and impact of sexual abuse for males including: (1) considering the intersection with racial, ethnic cultural, religious and sexual minority populations; (2) identifying underlying processes and mechanisms that may contribute to subsequent mental and physical health risk; and (3) engaging in advocacy, outreach, training targeting the sociocultural environment. This includes challenging and confronting the homophobia and traditional gender role norms that frequently silence male victims of sexual abuse.

## **OXIDATIVE STRESS AND ENVIRONMENTAL HAZARDS IN AUTISM SPECTRUM DISORDERS AND ATTENTION DEFICIT HYPERACTIVITY DISORDER: A REVIEW.**

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**Objectives:** Recent studies implicate environmental factors in the genesis of Autism Spectrum Disorders (ASD) and Attention Deficit Hyperactivity Disorder (ADHD) along with well known genetic factors<sup>1,2</sup>. We intend to systematic review studies on the role of oxidative stress and environmental exposures in the pathophysiology of autism spectrum disorders (ASD) and attention deficit hyperactivity disorders (ADHD).

**Methods:** A search of English language literature was conducted using Pubmed database. Free radicals, oxidative stress, heavy metals, inflammation, reactive oxigene species, environmental exposure, environmental pollutants e pesticides mesh terms were matched with keywords describing clinical outcome. A total of 103 original articles matched the objectives of our revision and were included.

**Results:** Positive associations were found between several biomarkers of oxidative stress and ASD and ADHD. Increased risk of these disorders was associated to exposure to several heavy metals, polychlorinated biphenyls, organophosphate and organochlorines across multiple developmental periods.

**Conclusions:** A possible link can be established between oxidative stress and the pathophysiology of ASD and ADHD, Environmental toxic exposures, even in low-doses, appear to play a role in this link.

<sup>1</sup>Rossignol DA, Genuis SJ and RE Frye. Environmental toxicants and autism spectrum disorders: a systematic review *Transl Psychiatry* (2014) 4, e360; doi:10.1038/tp.2014.4

<sup>2</sup> A Ghezzi P, Visconti, PM, Abruzzo, A, Bolotta, C, Ferreri, G, Gobbi, G, Malisardi, S, Manfredini, M, Marini, L, Nanetti, E, Pipitone, F, Raffaelli, F, Resca, A, Vignini, L, Mazzanti. Oxidative Stress and Erythrocyte Membrane Alterations in Children with Autism: Correlation with Clinical Features *PLOS ONE*, June 2013 | Volume 8 | Issue 6 | e66418



Topic

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# Epidemiology and Public Health

abstracts - volume 2

## **TWELVE-MONTH USE OF PSYCHOTROPIC MEDICATION IN A CROSS-SECTIONAL POPULATION-BASED STUDY: RESULTS FROM THE SÃO PAULO MEGACITY MENTAL HEALTH SURVEY**

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**Objectives:** The purpose of this study was to estimate the prevalence of use of psychotropic medication (UPM) in adult general population and among individuals with 12-month DSM-IV mood, and anxiety disorders in the São Paulo Metropolitan Area (SPMA), Brazil.

**Methods:** A representative cross-sectional household sample of 2,942 adults was face-to-face interviewed. The WHO Composite International Diagnostic Interview was used to assess psychopathology, disorder severity, and UPM. Respondents were asked about UPM during the previous 12-month. Multiple logistic regression analysis was used to evaluate associations of UPM with sociodemographic correlates and presence of psychopathology.

**Results:** Only 6.1% respondents reported UPM in the prior year. Multiple logistic regression showed that UPM was more common in women than in men (OR= 2.6; 95% CI=1.6-4.1), increased with age, years of education, and income. Only 13.6% of those with 12-month disorders reported UPM, being 24.9% among those with mood, and 14.4% in those with anxiety. Respondents without diagnosis also reported UPM (2.9%). UPM increased in the presence of the comorbidity, being higher in individuals with two or more disorders (21%; OR=2.7; 95% IC=1.8-4.1). Only 9% of respondent with one disorder had UPM. UPM was higher among respondents serious/moderate disorders (17.3%) dropping to 6.6% among those with mild disorders ( $p<0.0001$ ). Severe/moderate cases were more likely use antidepressants (OR=2.0; 95% CI=1.1-3.6) and mood stabilizers (OR=20.1; 95% CI=2.4-171.3), compared with mild cases.

**Conclusions:** These findings suggest that the majority of individuals diagnosed with any mental disorders are not being treated with psychotropic medication. Public policies should increase access to appropriate care, particularly among subgroups with low socioeconomic status.

### **References:**

The São Paulo Megacity Mental Health Survey was funded by the State of São Paulo Research Foundation (FAPESP: Project Temático Grant 03/00204-3), Brazil. This subproject was funded by the Fundação Araucária-Foundation in Support of the Scientific and Technological Development of the State of Paraná, Brazil.

## **ASSOCIATION OF HOSTILITY WITH OTHER PSYCHOSOCIAL FACTORS IN FEMALE POPULATION AGED 25-64 IN RUSSIA**

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**Objective:** To explore the prevalence of hostility (Hs) and its relation with other psychosocial factors in female population aged of 25-64 years in Russia (Novosibirsk).

**Methods:** Under the third screening of the WHO "MONICA-psychosocial" (MOPSY) program random representative sample of women aged 25-64 years (n=870) were surveyed in Novosibirsk. The response rate was 72.5%. Hs was studied by test «MOPSY» (subscale "Hostility"). Chi-square test ( $\chi^2$ ) was used to assess the statistical significance.

**Results:** The prevalence of high Hs level in the female population aged 25-64 years was 43.9%. The rate of high anxiety level increases with growth of Hs' grade (85.6%,  $p<0.01$ ). Major depression also has a peak in women with high Hs and makes up 20.7% ( $p<0.001$ ). Low indices of close contacts and social networks more likely to occur in group with high Hs. There was increasing of conflicts in family up to 62.8% with growth of Hs levels ( $p<0.05$ ). Women with high Hs more likely to have illness or death of a close last year (37.9%) and changes in marital status (17.3%). In relation to job stress women with high Hs were more likely to change their specialty, reducing the additional work; they had more negative attitude to their work, were less likely able to relax after working day.

**Conclusions:** The prevalence of high Hs in female population 25-64 years in Russia is large. Women with high Hs more likely have major depression, high personal anxiety, low social support, high job and family stress.

## **COMMON MENTAL DISORDERS AND ASSOCIATED FACTORS AMONG MEDICAL STUDENTS: SIX YEARS FOLLOW-UP INVESTIGATIONS FOR REPEATED SURVEY**

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**Objective:** to estimate the prevalence of common mental disorders (CMD) and associated factors among medical students in a public northeast Brazil University.

**Method:** A repeated inquiry cross-sectional study applying the Self Reporting Questionnaire-20 (SRQ-20) and a structured questionnaire development by the authors to the students admitted annually from 2006/1 until 2011/1. Correspondence analysis and Poisson regression were performed. **RESULTS:** We studied 40 students with 20±2.4 years old (57.5% was female and 41% admitted in the third entrance exam). The CMD had prevalence increased throughout the course from 12.5% in the first year to 43.2% in the fifth one. Variables potentially associated with CMD were: the course is less than expected (PR=3,20), discomfort with the course activities (PR=2,10), dissatisfaction with teaching strategies (PR=1,08), the course is not a source of pleasure (PR=2,06).

**Conclusion:** Factors potentially associated with CMD were mainly those related to the educational process, which demonstrates that the Medical School needs to reflect critically on their role in the promotion and prevention of these disorders in students. Further studies in this and other institutions of similar profile will contribute for the comparison and validation of our results. Finally, it is necessary to implement preventive measures such as: setting up of psycho-educational support services for students and teachers, besides the revision of the educational process as a way to minimize to the maximum the losses provoked by the development of this disorder.



## MENTAL HEALTH OF UNDOCUMENTED LATINO IMMIGRANTS IN THE UNITED STATES

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Undocumented Latino immigrants and their families make up a considerable proportion of the US population at-risk for mental health distress. Yet, research to inform the mental health of undocumented immigrants is scant and existing studies often lack scientific rigor (Garcini, et al., under review).

**Objective:** This study is part of formative research to assess the relevance of specific mental health concerns and related risk factors among undocumented immigrants in the US.

**Methods:** Formative data is being collected using focus groups and key informant interviews. Focus groups are being conducted among Latinos with past or present history of undocumented legal status, while key informant interviews are being conducted among health providers, community health workers, spiritual leaders, legal experts, immigration officials, activists, and researchers knowledgeable of the undocumented community. Qualitative data will be audiotaped, transcribed, and analyzed through systematic methods outlined by Miles and Huberman (1994) using NVivo V.10.

**Results:** Preliminary results suggest that depression is a relevant concern among undocumented immigrants, although symptoms presentation may vary from traditional diagnosis. Also, anxiety (including *Nervios* and *Ataque de Nervios*), somatization and stress-related disorders appear to be common. Psychological distress related to the immigration-experience is also common, with presenting stressors varying across different stages of the immigration process. Common stressors post-migration include victimization, marginalization, isolation, acculturative stress, and fear of deportation, among others.

**Conclusion:** Results from this study will be used to inform a subsequent clinical study to assess the prevalence of identified mental health disorders, and relevant *cultural and contextual concepts of distress*, among undocumented immigrant Latinos living near the US-Mexico border. This information is necessary to allocate more appropriate use of healthcare services, ensure a healthier workforce and community, and to inform the development of interventions and policies. Challenges in conducting research with undocumented immigrants will also be outline.

## **REGISTER-BASED PSYCHIATRIC DISORDERS IN PARENTS AND SIBLINGS OF INDIVIDUALS DIAGNOSED WITH AUTISM SPECTRUM DISORDERS IN A DANISH HISTORIC BIRTH COHORT**

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**Objectives:** The aim of this study is to estimate the psychiatric disorders ratios in parents and siblings of individuals diagnosed with ASD and their frequency-matched controls utilizing a Danish Historic Birth Cohort (HBC).

**Methods:** Danish nation-wide health registers were utilized to identify singleton individuals diagnosed with ASD and their controls in the HBC as well as to identify and follow-up parents and siblings of individuals diagnosed with ASD and their controls in the HBC for psychiatric diagnoses. The prevalence of psychiatric disorders among parents and siblings of individuals with ASD and controls were determined using Mantel–Haenszel Chi square tests and Mantel–Haenszel estimate of the odds ratio (OR) controlling for gender and year of birth.

**Results:** The study population consisted of 414 ASD cases and 820 controls. Fathers of ASD patients were at increased risk of being diagnosed with psychiatric disorder compared to fathers of controls (OR 1.54 with confidence interval [CI] [1.06 – 2.25]) and this was comparable in mothers as well (OR 1.51 CI [1.10 – 2.09]). Estimates were mainly driven by mood disorders. Among siblings of ASD patients, prevalence of ASD averaged 2.9% compared to 0.8% among siblings of controls (OR 3.46 CI [1.33 – 8.98]). Comparable to parents, siblings of ASD patients had increased risk of being diagnosed with psychiatric disorder compared to siblings of controls.

**Conclusions:** Results reported not only add to the current evidence of the hybrid genetic/environmental etiopathology of ASD but also should be approached in the context of mental health services and policy strategies.

## **BIOMETEOROLOGY IN PSYCHIATRIC EMERGENCY CARE**

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### **Objectives**

Some studies have examined the relationship between meteorological factors and a worsening of some psychiatric disorders.

Between 30 and 60 % of the population are vulnerable to meteorological changes. Specifically, a greater relationship has been observed between mood disorders and affective syndromes and the season of the year. Similarly, an association has been found between daily emergency admissions and meteorological conditions

The objective of this study was to compare the total number of emergencies treated on a yearly and monthly basis and to identify the most prevalent psychiatric disorders.

### **Methods**

The Clinical Management Unit of the area of Psychiatry at the "Virgen de la Macarena" Hospital provides mental healthcare services to a population of 580,203 inhabitants.

A total of 30,418 patients were admitted to the emergency unit.

Sociodemographic and clinical data were collected including: year and month of admission, gender, motive of consultation, diagnosis, autolytic attempt and hospital admission.

### **Results**

If we analyze data on a monthly basis, all disorders show a similar distribution pattern, and it is between May and September when more emergency visits were recorded. Bipolar disorders are more prevalent in April, schizophrenia and anxiety disorders in May, depressive disorders in June, substance use disorders in July, and personality disorders are more frequent in August.

### **Conclusions**

In addition, a relationship has been observed between meteorological factors and a higher prevalence of certain disorders. It should be noted that the lower availability of Mental Health Unit psychiatrists during the holiday period leads patients to attend Emergency Units.

### **References**

1) Miró García F, Sató i Buada S, Xifró Collsamata A, Grau Joaquim I, Alonso Pérez Y et al. Meteorological factors and psychiatric emergencies. *Actas Esp Psiquiatr* 2009; 37 (1): 34-41.

## COMPARING THE NUMBER OF EMERGENCIES VISITS WITH THE NUMBER OF HOSPITAL ADMISSIONS BETWEEN 2007 AND 2013

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<sup>1</sup>. U.G.C. Salud Mental, Área Hospitalaria Virgen Macarena

### Objectives

In a well-structured mental health care program, more care should be provided to and demanded by the most severely-ill patients. However, the reality is sometimes different. This study was also aimed at comparing the number of emergencies with the number of hospital admissions of patients diagnosed with the following disorders: schizophrenia, anxiety disorder, depressive disorders, personality disorders, substance use disorder, bipolar disorder and schizoaffective disorder

### Methods

A total of 30,418 subjects were seen at our emergency unit between 2007 and 2013.

Sociodemographic and clinical data were collected including: year and month of admission, gender, motive of consultation, diagnosis and hospital admission.

A retrospective, descriptive, statistical analysis was performed.

### Results

With regard to emergency visits the most prevalent disorder was anxiety (18.2%), followed by schizophrenia (15.8%), personality disorders (14.3%) and depressive disorders (11.7%).

With regard to hospital admissions, the most prevalent disorder was schizophrenia (42.0%), followed by personality disorder (13.5%), bipolar disorder (13.1%) and depressive disorder (9.7%).

It Requires hospitalization: 46.35% of emergency visits for schizoaffective disorder; 44.65% of emergency visits for schizophrenia; 15.7% of emergency visits for a personality disorder; 13.8% of emergency visits for depressive disorders; 3.9% of emergency visits for substance use disorder and 2.5% of emergency visits for anxiety disorders

### Conclusion

The disorders that most frequently require hospitalization after an emergency visit are schizophrenia and schizoaffective disorders, while anxiety disorders rarely require it.

### REFERENCES:

- (1) Horsfall J, Cleary M, Hunt GE. Acute inpatient units in a comprehensive (integrated) mental health system: a review of the literature. *Issues Ment Health Nurs* 2010; 31(4):273-278

## **SUICIDE IN LIAISON PSYCHIATRY**

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### **Objectives:**

The main function of liaison psychiatry services is to treat psychiatric comorbidities that can appear in inpatients with organic pathology.

Our objective is to perform a descriptive analysis of the sociodemographic and clinical characteristics of patients that were treated by the liaison psychiatry service of our hospital after being admitted for suicide attempt.

### **Methods:**

We registered patients treated in 2013 for suicide attempt, collecting demographic and clinical data: sex, age, month of assistance; consulting service and total length of hospital stay; the existence of psychiatric history, previous suicide attempts and previous treatment by mental health; referral to continue as an inpatient in the psychiatric hospitalization unit, length of stay in the psychiatric hospitalization unit and the existence of physical consequences.

### **Results:**

We treated 89 patients, 59.5% female, with a mean age of 42.79 years; 75.3% had psychiatric history and 68.5% were being treated by mental health; 48.9% had a history of suicide attempts. The main consulting service was the emergency observation unit (86.5%), with an average stay of 1.59 days. The most used method was medication overdose (89.9%), being mostly without physical consequences (93.3%). 30.3% of the inpatients were referred to the psychiatric unit, with an average stay of 10.13 days. At discharge the most common diagnosis was depressive disorder (40.9%).

### **Conclusions:**

The results shown in our study are similar to those observed in studies of our environment.

### **References:**

- Cooper-Kazaz R. Psychiatric Consultation of all Suicide-Attempt Patients during a One Year Period in a Tertiary Hospital. IMAJ 2013; 15: 492-497.
- Tauch D, Winkel S, Quante A. Psychiatric consultations and therapy recommendations following a suicide attempt in a general hospital and their associations with selected parameters in a 1-year period. Int J Psychiatry Clin Pract. 2013; 13.

## **TYPE 2 DIABETES, GLYCEMIC CONTROL AND DEPRESSION**

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<sup>1</sup>Hospital Universitario de Fuenlabrada <sup>2</sup>Hospital Universitario Rey Juan Carlos

**Objectives:** to estimate the cross-sectional relation between glyceimic control and clinically relevant depression in adults with type 2 diabetes in Fuenlabrada.

**Methods:** using a cross-sectional design, this study administered the Beck Depression Inventory Scale ( cut-off  $\geq 16$  points) and a semi-structured diagnostic interview to a sample of 325 patients diagnosed with type 2 diabetes to determine the prevalence of depression and the association with glyceimic control. Poor glyceimic control was defined as an HbA1c level of 7% or higher (uncontrolled diabetes). A logistic regression model was used to assess the association after adjusting for known risk factors.

**Results:** Poor glyceimic control was associated with a 55% increased risk of depressed mood (odds ratio 1,55, 95% confidence interval 0,97-1,89) Those with depression were more likely to be women, older age, obese and on insulin treatment.

**Conclusions:** Depression is associated with poor glyceimic control in individuals with type 2 diabetes when other factors were controlled.

## **TYPE 2 DIABETES, GLYCEMIC CONTROL AND DEPRESSION**

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**Results:** Poor glycemic control was associated with a 55% increased risk of depressed mood (odds ratio 1,55, 95% confidence interval 0,97-1,89) Those with depression were more likely to be women, older age, obese and on insulin treatment.

**Conclusions:** Depression is associated with poor glycemic control in individuals with type 2 diabetes when other factors were controlled.

## EARLY TRAUMA IN PSYCHIATRIC PATIENTS OF A GENERAL HOSPITAL

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**Objectives:** Determining prevalence of Early Trauma events (ET) in patients with various mental health disorders ; assessing relationship with chronic symptoms.

Method: In 2012, all 586 patients, during routine clinical visits were assessed for previous trauma using the Marshall Scale. CGI and GAF were also used.

DSM-IVtr was the reference for all the psychiatric diagnoses.

The interviews and scales were administered by the respective attending psychiatrists of each patient.

**Results:**The prevalence of any ET was 52%. Scores of the Marshall scale indicated the prevalence of trauma as 42%. 84% of ET was Sexual Trauma (ST: abuse or rape). ST was highest in women (41.7%) men (13.1%). ST in depressive disorders was 41%, in bipolar disorders was 25.2% (CHI 10.4111127, P 0.0012529).

The GAF rate with ET was 58.7 and without ET was 61.57. The CGI rate showed no difference.

**Conclusions:** The prevalence of ET was frequent as was sexual abuse. The ST occurred more often in women than men. In women ST was perpetrated by close relatives, in men by non-related people.

The most frequent diagnosis was bipolar disorders, but sexual abuse occurred most often in depressive disorders. No substantial difference appeared in the GAF or in the CGI with or without trauma.

Further investigations: Specify comorbidity, measure impairment, document domestic violence history and suicide attempts and relate all with ET.

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## SEASONALITY PHENOMENON ASSOCIATION ON SUICIDAL BEHAVIOR, AFFECTIVE AND PSYCHOTIC DISORDERS — A RETROSPECTIVE STUDY OF 2007-2012 PSYCHIATRY INPATIENT SERVICE

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**Introduction:** Seasonality is an etiopathogenic factor on psychiatry diseases and it was associated to affective (e.g. depression) and psychotic (e.g. first episode of psychosis) disorders, and suicidal behavior rates in some studies. It is possible that seasonality effect is influenced by social and demographic factors, as well as weather changes, latitude, biologic rhythms or genetic polymorphisms.

**Objectives:** To study and determine the association and its intensity between seasonality and suicidal behavior, affective and psychotic disorders on CHPL Psychiatric Clinic IV inpatient service.

**Methods:** The authors used Psychiatry Clinic IV inpatient database from 2007 to 2012 to collect and statistically analyze data on context (gender, age), thematic (seasonality, ICD-9 affective and psychotic disorders codes) and context (suicidal behavior) variables.

**Results:** In a total of 2902 admissions (mean age 45.5 years; male 49.7% and female 50.3%) we found 37.4% of affective and 29.0% of psychotic disorders, and 20.9% of suicidal behavior. There was no statistically significant association between seasonality and affective ( $V=0.138$ ) and psychotic disorders ( $V=0.163$ ), or suicidal behavior ( $V=0.138$ ).

**Discussion:** Seasonality influence on psychiatry disorders is difficult to access because it is a multifactorial phenomenon. The study has some limitations: e.g. use of ICD-9 codes for diagnosis; it was conducted exclusively on an inpatient clinic; few context variables on sociocultural and demographic factors, personality traits and climate characteristics.

**Conclusions:** We found no significant effect of seasonality on suicidal behavior, affective and psychotic disorders. Further and more complex studies are necessary to determine the extent of seasonality on psychiatry disorders.

## PREVALENCE AND SEVERITY OF MENTAL DISORDERS IN THE GENERAL POPULATION OF MURCIA, SPAIN: THE PEGASUS-MURCIA PROJECT

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<sup>11</sup> Departamento de Salud y Ciencias Experimentales. Universidad Pompeu Fabra. Barcelona. Spain.

**Objective:** To describe the 12-month and life-time prevalence rates and severity of DSM-IV disorders in the Region of Murcia (Spain).

**Methods:** The PEGASUS-Murcia Project[1] is a cross-sectional face-to-face interview survey of a representative sample of non-institutionalized adults in Murcia (Spain) between June 2010 and May 2012. DSM-IV disorders were assessed by the Composite International Diagnostic Interview (CIDI 3.0).[2] Main outcome measures (% and 95%CI) were life-time and 12-month prevalence of Anxiety, Mood, Impulse and Substance Disorders and Severity.

**Results:** A total of 2,621 participants (67.4% response rate), 54.5% females, mean age 48.6 years old. Twelve-month prevalence of disorders: any anxiety 9.7 % (7.6-12.2); any mood 6.6 (5.5-8.1); any impulse 0.3 (0.1-1.2); and any substance use 1.0 (0.4-2.4). Lifetime: any anxiety 15.0 % (12.3-18.1); any mood 15.6 (13.5-18.1); any impulse 2.4 (1.4-4.0); and any substance use 8.3 (6.2-11.0). Severity among 12-month cases: serious 29.2 (20.8-39.4); moderate 35.6 (24.0-49.1); and mild 35.2 (29.5-41.5). Women were 3.7 and 2.5 times more likely to suffer a 12-month anxiety and mood disorders, respectively, than men. Substance use was more frequent among men. Younger age and lower income were also associated with higher prevalence.

**Conclusions:** Mental disorders are frequent, more common in female and moderate-serious cases are almost two thirds of those with a DSM-IV diagnosis. Prevalence during the economic crisis in Murcia is higher than previous estimates for Spain[3] and Europe[4] but lower than for the USA[5] .

**Keywords:** Cross-sectional survey, mental disorders, prevalence, severity

## USE OF HEALTH SERVICES, ADEQUACY AND DELAY OF INITIAL TREATMENT CONTACT OF MENTAL DISORDERS IN GENERAL POPULATION: THE PEGASUS-MURCIA PROJECT

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**Objective:** to assess the use of health services among individuals with common mental disorders (anxiety and mood) by disorder and by health care professional and to analyze treatment adequacy.

**Methods/Design:** Participants in The PEGASUS-Murcia Project,(1) a new cross-sectional face-to-face interview survey based on a representative sample of non-institutionalized adults in the Region of Murcia (Spain), were interviewed between June 2010 and May 2012. DSM-IV disorders were assessed by trained lay interviewers using the Composite International Diagnostic Interview (CIDI 3.0).(2) Participants were asked to report if they consulted formal healthcare professionals due to their mental health problems and the treatment received in the previous year. Minimally adequate treatment was defined upon available evidence-based guidelines as receiving either pharmacotherapy ( $\geq 2$  months of an appropriate medication for the focal disorder plus  $> 4$  visits to any type of physician) or psychotherapy ( $\geq 8$  visits with any HC or HS professional lasting an average of  $\geq 30$  minutes).

**Results:** The total sample was 2,621 participants, of which 9.7 % had anxiety and 6.6 % mood disorders during the previous 12 months. Only 47 % of individuals with anxiety and 62% of those with mood disorders had visited a formal healthcare professional in the previous year. Among those with at least one medical visit, 74 % (anxiety) and 79 % (mood) had a minimally adequate treatment.

**Conclusions:** The use of health services of people with anxiety and mood disorders in Murcia should be clearly improved.

**Keywords:** Cross-sectional survey, mental disorders, mental health services, utilization

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## **MENTAL DISORDERS IN THE GENERAL POPULATION AFTER THE EARTHQUAKE IN LORCA, 2011 (MURCIA, SPAIN): THE PEGASUS-MURCIA PROJECT**

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**Objective:** To compare the 12-month prevalence rates of DSM-IV disorders in the general population of Lorca with the rest of the Region of Murcia (Spain) after the moderate magnitude 5.1 Mw earthquake that caused significant localized damage (May 11, 2011).

**Methods:** The PEGASUS-Murcia Project[1] is a cross-sectional face-to-face interview survey of a representative sample of non-institutionalized adults in Murcia (Spain) between June 2010 and May 2012. DSM-IV disorders were assessed by the Composite International Diagnostic Interview (CIDI 3.0).[2] Main outcome measures (% and 95% CI) were 12-month prevalence of Anxiety, Mood, Impulse and Substance Disorders and Severity. People from Lorca were interviewed 6-10 months after the earthquake.

**Results:** A total of 2 621 participants (67.4% response rate), 415 of whom from Lorca (71% response rate). Twelve-month prevalence of post-traumatic stress disorder (PTSD) (3.6; 95% IC: 1.9-7.0) is higher in Lorca than in the rest of Murcia (0.5; 0.3-1.1). Mood disorders are significantly more serious in Lorca residents (62.8; 59.5-65.9 vs 27.9; 15.8-44.4).

**Conclusions:** After the earthquake, PTSD is the only mental disorder with a higher 12-month prevalence among Lorca residents compared with those of the rest of Murcia, the Spanish general population of Spain[3] and Europe[4].

**Keywords:** Cross-sectional survey, mental disorders, prevalence, severity

## THE EFFECT OF BEVERAGE TYPE ON ALCOHOL PSYCHOSES RATE IN RUSSIA

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**Objectives:** The level of alcohol-related problems in Russia is among the highest in the world [2]. There is evidence that beverage preference may have modifying influence on alcohol-related problems risk independently of the amount of alcohol consumed [1]. The distinctive trait of Russian drinking culture is a high overall level of alcohol consumption and the heavy episodic (binge) drinking pattern of strong spirits (vodka) [2]. In line with these pieces of evidence, we assume that occasional heavy drinking of vodka in Russia should result in a positive association between vodka sale and alcohol psychoses rate at the aggregate level. The aim of this study was to examine the relation between the consumption of different beverage types and alcohol psychoses rate in Russia.

**Methods:** Alcohol psychoses incidence/prevalence data and data on beverage-specific alcohol sale for the period 1980-2005 were obtained from Russian State Statistical Committee. Time-series analytical modeling techniques (ARIMA) were used to examine the relation between the sale of different alcoholic beverages (vodka, wine, beer) and alcohol psychoses incidence/prevalence rates.

**Results:** The analysis suggests that of the three beverages vodka alone was associated with alcohol psychoses incidence/prevalence rates in Russia. The estimated effect of vodka sale on the alcohol psychoses rate is clearly statistically significant: a 1 liter increase in vodka sale would result in a 29.2% increase in the alcohol psychoses incidence rate and in 27.1% increase in the alcohol psychoses prevalence rate.

**Conclusions:** The findings from this study suggest that public health efforts should focus on both reducing overall consumption and changing beverage preference away from distilled spirits in order to reduce cerebrovascular mortality rates in Russia.

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## CONSUMPTION OF ALCOHOL SURROGATES AMONG ALCOHOL DEPENDENT WOMEN

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**Objectives:** The problem of the consumption of noncommercial alcohol in the Commonwealth of Independent States (CIS) countries has attracted the attention of researchers and specialists in the public healthcare field after the epidemic of poisonings by surrogate alcohols, which swept across Russia and Belarus in 2006 [1,2]. Isolated studies suggest that the main consumers of noncommercial alcohol are heavy drinkers, i.e., persons who abuse alcohol and also suffer from alcohol dependence [1]. Therefore, this study was design to explore the prevalence, drinking pattern, types, reasons and correlates of the consumption of noncommercial alcohol among alcohol dependent women admitted to narcological clinic.

**Methods:** The study was conducted in the Belarusian city Grodno in 2013 with 103 alcohol dependent women admitted to narcological clinic using structured interviews.

**Results:** The results suggest that at least 30,3% alcohol dependent women regularly consume samogon and 10.8% of women use surrogates, the most popular among which are medications with a high percentage of ethanol and industrial spirits. The belief that, according to quality criteria, samogon exceeds licensed vodka is the main motive for its consumption.

**Conclusions:** This is the first in-depth study of the alcohol surrogates drinking pattern, types, reasons and correlates among alcohol dependent women in Belarus. The results from present study confirm that the use of noncommercial alcohol is common among alcohol dependent women even though its use may have been underreported. These findings emphasize the urgency of implementing comprehensive alcohol policy, which need to address overall consumption, harmful drinking pattern and taking into account the consumption of alcohol from illicit sources.

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## NEIGHBOURHOOD ETHNIC DENSITY AND SUICIDE RISK AMONG ETHNIC MINORITY GROUPS IN THE FOUR BIG CITIES IN THE NETHERLANDS

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**Objectives** Recent studies suggested the presence of a favorable association between the density of the own ethnic minority group in the neighborhood and the risk of psychotic disorders. In this study, it was investigated whether this so-called 'ethnic density hypothesis' is also relevant to suicide risk, which is not sensible to bias associated with ethnic differences in access to health care and reflects a broad range of mental health problems.

**Methods** Suicides in the four big cities in the Netherlands during 2000-2011 were ascertained using the cause of death register of Statistics Netherlands and analyzed in relation to individual- and district/ neighborhood level characteristics.

**Results** With increasing minority density of the neighborhood, the rate ratio of suicide among non-Western immigrants compared to native Dutch persons decreased significantly from 0.90 to 0.65 ( $P < 0.001$ ). This was explained by increasing suicide rates among the Dutch ( $P < 0.001$ ) and decreasing rates among the non-Western with increasing minority density ( $P = 0.07$ ). For Moroccan and Surinamese/ Antillean persons, the associations with the own-group density of the neighborhood were statistically significant ( $P < 0.05$ ). Non-Western suicides more often moved house to own-group dense areas and less often to areas with a lower proportion of the own ethnic group in the 5 years prior to the date of death, compared to personally matched controls.

**Conclusions** Our findings support the beneficial influence of the presence of the own-ethnic group in the neighborhood on suicide risk among non-Western minorities. As moving house to minority dense areas prior to suicide was observed, this influence may have been underestimated.

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## **GRD 430 (PSICOSIS): COMPORTAMIENTO A LA LUZ DEL CMBD**

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### **Objetivos**

Evaluar el comportamiento del GRD 430 (Psicosis) en España durante el año 2007 en mayores de 45 años. Secundarios: Determinar el peso de las variables edad, sexo y reingreso sobre su comportamiento.

### **Métodos**

Diseño: Descriptivo transversal. Muestra: Todos los pacientes ingresados en España y calificados de GRD 430 durante 2007. Fuente: Conjunto mínimo básico de datos hospitalarios. Variables principales: edad, sexo, estancia, número de diagnósticos al alta (NDA), número de procedimientos al alta (NPA), reingreso y tipo de ingreso (urgente –IU- vs programado –IP-).

### **Resultados**

13.959 ingresos en 2007. El 54,4% fueron mujeres. 13 códigos CIE9-MC proporcionan un porcentaje acumulado del 61% de diagnósticos, siendo los más frecuentes el 295.34 (esquizofrenia paranoide con exacerbación, 8,83%), 298.9 (Psicosis Neom, 7,80%) y 296.40 (trastorno bipolar maníaco, 6,75%).

Ingreso urgente en el 92,4%, sin diferencias por sexos. NDA: 3,17±2,32; NPA: 12,25±19,94. Edad (mujeres vs varones) 59,21±11,27 vs 56,85±10,69 años (p<0,001). El 73,4% de los ingresos se produjeron en la franja etaria 45-64 años, un 21,7% entre los 65 y 79 años.

Sin diferencias por sexo para estancia, NDA y NPA. Tasa de éxitos 0,6% (0,5% en mujeres vs 0,8% varones, p=0,015). Reingreso a 30 días: 7,5%, sin diferencias por sexos. Reingresaron el 6,6% de los IU frente al 19,3% de los IP (p<0,0001).

### **Conclusiones**

Los ingresos bajo el GRD 430 fueron algo más frecuentes en mujeres, mayoritariamente vía urgencias, con mayor prevalencia en los menores de 64 años. Las mujeres son mayores que los varones, presentaron similares complejidades diagnóstico-terapéuticas y una tasa de mortalidad a 30 días inferior a los hombres. Reingresan más los ingresados de modo programado, sin diferencias por sexos.



## **CORRELATION OF PSYCHIATRIC DISORDERS AND INJURIES: DATA FROM IRANIAN MENTAL HEALTH SURVEY (IRANMHS)**

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**Objective:** Injuries and psychiatric disorders, are associated with a high burden, and have a bi-directional relationship. Those inflicted with physical trauma and injuries face an increased risk of mental illness and long-term psychosocial consequences. On the other hand, psychiatric disorders may make the individual prone to injuries. The objective of the study was to assess the correlation of mental disorders with non-intentional non-fatal injuries in a national survey.

**Method:** A total of 7886 participants aged 15 to 64 years were interviewed in a national household survey throughout the year 2011. Composite International Diagnostic Interview (CIDI), version 2.1 was implemented in order to assess the prevalence of psychiatric disorders in the past twelve months. Injuries were assessed using Short Form Injury Questionnaire (SFIQ-7).

**Results:** History of an injury in the past twelve months was found in 2637 (weighted% of 35.92) participants and 1657 (weighted% of 22.76) mentioned having such a history during the past three months. Psychiatric disorders, consisting of mood, anxiety and alcohol/substance use disorders, were associated with an increased risk of injuries in the past twelve months (OR= 1.67, 95% CI: 1.47-1.91). Any alcohol use disorder (alcohol abuse or dependence) was also associated with injuries (OR= 2.06, 95% CI: 1.06-4.02). In a multivariate model, using logistic regression analysis, mental disorders were significantly correlated with injuries in the past three months (OR= 1.59, 95% CI: 1.36-1.87), recurrent injuries (OR= 1.71, 95% CI: 1.21-2.41) and road/traffic accidents (OR= 2.37, 95% CI: 1.28-4.49).

**Conclusion:** Psychiatric disorders were found to be associated with injuries. Early detection and treatment of mental illness may reduce the risk of injuries.

## **SOME FEATURES OF ANTIDEPRESSANTS' CONSUMPTION IN WESTERN BELARUS**

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**Objectives.** We decided to investigate the tendency of antidepressants' consumption in Western Belarus (Grodno region) during 2011-2013.

**Methods.** The data of antidepressants' sales (number of tablets) in Grodno region was analyzed.

**Results.** In 2011 the list of the antidepressants included the following ones (the percentages indicate the sales of each antidepressant in order of descending): amitriptyline (54.3%), maprotiline (17.7%), paroxetine (12.0%), venlafaxine (5.3%), sertraline (3.9%), fluoxetine (2.1%), fluvoxamine (2.1%), clomipramine (1.8%), escitalopram (0.7%), agomelatine (0.1%). In 2012: amitriptyline (54.4%), maprotiline (17.0%), paroxetine (12.7%), sertraline (4.6%), venlafaxine (4.4%), clomipramine (1.7%), fluoxetine (1.6%), tianeptine (1.5%), fluvoxamine (1.3%), escitalopram (0.7%), agomelatine (0.1%). In 2013: amitriptyline (48.4%), maprotiline (20.1%), paroxetine (15.7%), sertraline (6.7%), venlafaxine (4.1%), clomipramine (1.5%), fluoxetine (1.6), fluvoxamine (1.2%), escitalopram (0.6%), agomelatine (0.1%). The average price of the treatment during 1 month with these antidepressants are the following (in order of ascending): amitriptyline (<1\$) < fluoxetine (4\$) < venlafaxine (6\$) < maprotiline (8.5\$) = clomipramine (8.5\$) < paroxetine (10\$) < sertraline (13\$) = tianeptine (13\$) < fluvoxamine (19\$) < escitalopram (30\$) < agomelatine (43\$). It is important that fluoxetine is presented exclusively as a cheap Ukrainian generic which is not well known in the Belarusian pharmaceutical market. All other antidepressants-leaders are the least expensive representatives of this class of drugs.

**Conclusions.** 1) both traditional (i.e. amitriptyline, maprotiline, clomipramine) and newer antidepressants are presented on the pharmaceutical market of Western Belarus (Grodno region), but this class of drugs is lacking in diversity; 2) the main factor that had influence on the rate of consumption of antidepressants is pharmaco-economic one (i.e. the price of the drug); 3) the most cheap antidepressant (amitriptyline) has almost the same consumption rate as all the others antidepressants combined.

## **FOREIGN POPULATION IN A COMMUNITY MENTAL HEALTH UNIT.**

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### **Objectives**

According to the IOM (International Organization for Migration), currently estimated that the number of international migrants worldwide totaled 214 million, 3.1% of the world population, of which 10 - 15% corresponds to illegal migrants. In Spain, there has been over the last decade an exponential increase from immigration. This involves an adaptation of both the immigrants and the welcoming country people at different levels. In this analysis we focus on the healthcare sector.

One of the objectives of the Department of Health "Citizenship and Integration Strategic Plan 2007 - 2010" was to ensure the right to health protection to immigrants through effective access to health care.

### **Methods**

This study will analyze certain demographic variables of those immigrants who access a specialist care in Mental Health, more specifically to the Community Health Unit Huelva. The variables studied are: sex, age, nationality and assistance to duty after having scheduled appointment.

### **Results**

The results indicate that of all first consultations from January to end of May this year, 3.34% are people with foreign nationality. In this sample, the majority are women and she are aged between 15 and 60 years old.

The countries of origin, which has sued more often in this period appointment Mental Health, were the countries of Romania (37.14%), Morocco (22.85%) and Poland (14, 28%). These three countries encompass almost 75% of the claims.

### **Conclusions**

Although the number of lawsuits by foreigners Mental Health is not very high, we consider it necessary to perform a particular attention, which respond to the diversity of this population. In other words, from acceptance and commitment to this complex and diverse reality and his approach, it will get better access and improved quality in health care, both immigrants and citizenship.

## NEIGHBORHOOD ETHNIC DENSITY AND PSYCHOTIC DISORDERS AMONG ETHNIC MINORITY GROUPS IN UTRECHT CITY

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**Objectives** Recent studies have shown increased incidence of non-affective psychotic disorders (NAPD) among ethnic minorities compared to the native population, but not, or less so, in areas with a high own-group proportion. The aim is to investigate this ethnic density effect in Utrecht and whether this effect is due to higher rates of NAPD among Dutch persons in areas with high minority proportions. Also, to explore the geographical scale at which this effect occurs and the influence of social drift prior to NAPD.

**Methods** NAPD cases in the Psychiatric Case Registry Middle Netherlands (N=2,064) and living in Utrecht during 2000-2009 were analyzed in a Poisson model in relation to both individual-level and district- vs. neighborhood-level characteristics.

**Results** With increasing minority density, especially of the neighborhood, the rate ratios of NAPD significantly decreased among both non-Western (from 2.36 to 1.24) and Western immigrants (from 1.63 to 1.01), in comparison with Dutch persons. This was partly explained by higher rates of NAPD among Dutch persons in areas with high minority density. But there was also a trend to lower NAPD rates among non-Western minorities in these areas (P=0.074). This trend was significant among Surinamese/Antilleans (P=0.001) and among Moroccans aged 18-30 years (P=0.046). Among the Dutch, a social drift to minority-dense neighborhoods prior to NAPD registration was found.

**Conclusions** Our findings support the beneficial association with own-group presence at the smaller scale neighborhood level. Findings show also that this association is more pronounced in immigrant vs. native comparisons and is not found within all ethnic groups.

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## **DESCRIPTIVE STUDY OF THE TOTAL NUMBER OF PSYCHIATRIC EMERGENCIES AND HOSPITAL ADMISSIONS. A PURPOSE OF 30418 CASES**

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### **Objectives**

The main objective of this study was to perform a descriptive analysis of the total number of psychiatric emergencies and hospital admissions registered at our hospital district between 2007 and 2013.

### **Methods**

The Clinical Management Unit of the area of Psychiatry at the "Virgen de la Macarena" hospital provides mental healthcare services to the province of Seville (Spain)

Sociodemographic and clinical data were collected including: year and month of admission, gender, motive of consultation, diagnosis and hospital admission.

A retrospective, descriptive, statistical analysis was performed.

### **Results**

A total of 30,418 patients were admitted to the psychiatric emergency ward between 2007 and 2013, of which 47.4% were male.

The most prevalent disorders were anxiety (18.2%), followed by schizophrenia (15.8%), personality disorders (14.3%), depressive disorders (11.7%) and substance use disorders (7.8 %)

The highest number of psychiatric emergency episodes was recorded in 2008

As regards distribution by months, May and August were the months where more emergencies were attended (9.3%), and more emergencies were recorded in the third trimester.

With regard to gender and emergency visits, schizophrenia or substance use disorders are more prevalent among male, while anxiety disorders, depressive disorders and personality disorders are more prevalent among female.

With regard to hospital admissions, the most prevalent disorders were schizophrenia (42.0%), followed by personality disorder (13.5%), bipolar disorder (13.1%) and depressive disorder (9.7%). A total of 52.1% of patients hospitalized were male.

### **Conclusion**

The data obtained in our community are consistent with those obtained for other similar communities of Spain.

### **References**

1) Horsfall J, Cleary M, Hunt GE. Acute inpatient units in a comprehensive (integrated) mental health system: a review of the literature. *Issues Ment Health Nurs* 2010; 31(4):273-278.

## **AN ANALYSIS OF SUICIDE ATTEMPTS IN THE PROVINCE OF SEVILLE (SPAIN) IN THE 2007-2013 PERIOD BASED ON EMERGENCY CARE DEMAND**

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### **Objectives**

The objective of this study was to compare the number of emergency patients with suicidal thoughts / attempting suicide/ committing suicide and unemployment rates in the province of Seville, Spain. To such purpose, we analyzed the evolution of the data mentioned above between 2007 and 2013.

The secondary objective was to examine whether there is a relationship between gender and suicidal ideation/suicide attempts.

### **Methods**

Of a total of 30,418 hospital emergencies treated between January 1, 2007 and December 31, 2013, we selected those patients who presented with suicidal ideation or a suicide attempt.

The number of suicides and unemployment rates were extracted from the Spanish Statistics Office database.

### **Results**

A total of 30,418 patients were admitted to the emergency unit. In 20.8 % of cases, the patient presented with suicidal ideation, while 19.37% had attempted suicide.

We observed a rise of admissions to the emergency ward in 2012 due to suicidal ideation, a suicide attempt or death by suicide in parallel to an increase of unemployment rates. This trend was not sustained over the six years of study.

Among admissions to the emergency ward, we observed a statistically significant association between gender: and suicidal ideation/suicide attempts (More prevalent among female) and completed suicide (more prevalent among male)

### **Conclusion**

A direct causal relationship cannot be established between economic crisis and suicidal ideation, suicide attempts and number of deaths by suicide. However, a relationship was found between the increased number of emergency episodes for suicidal ideation, suicide attempts and completed suicide and unemployment rates in 2012.

### **References**

1) Cooper Kazaz R. Psychiatric consultation of all suicide-attempt patients during a one year period in a tertiary hospital. IMAJ, 2013. 15(8):424-429.

## THE IMPACT OF THE ECONOMIC CRISIS ON PSYCHIATRIC EMERGENCY SERVICES

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### Objectives

The objective of this study was to elucidate whether the current socio-economic context has led to an increase in the number of patients admitted to the psychiatric emergency unit of our hospital.

### Methods

A total of 30,418 subjects were seen at our emergency unit between 2007 and 2013.

A retrospective, descriptive, statistical analysis was performed to assess the evolution over the years of the following disorders: anxiety disorder, depressive disorder and substance use disorder.

### Results

Between 2007 and 2013, a total of 30,418 subjects were admitted to our psychiatry emergency unit. Of the total number of subjects seen, 15.8% (4,802) were diagnosed with an anxiety disorder, 9.8% (2,972) were diagnosed with a depressive disorder and 6.6% (1,993) were diagnosed with a substance use disorder.

Anxiety disorder diagnoses tend to be uniformly distributed over most of the years studied, except for the years with higher unemployment rates (increase number of emergencies and hospital admissions)

No association was observed between economic crisis and depressive disorder. Concerning gender, from 2011 on, the proportion of men hospitalized for depression progressively increased to exceed the number of women in 2012.

No association was observed between economic crisis and substance use disorders

### Conclusion

This study shows that there is an association between economic crisis and an increase both, in the number of emergencies treated and in the number of hospital admissions for anxiety disorders. No association was observed between economic crisis and depressive and substance use disorders.

Males were found to be more vulnerable to the economic crisis.

### References

1) Urbanos-Garrido RM, Lopez-Valcarcel BG. The influence of the economic crisis on the association between unemployment and health: an empirical analysis for Spain. Eur J Health Econ 2014.

## **CORRELATION BETWEEN THE LEVEL OF REMUNERATION AND BURNOUT SYNDROME IN PROFESSIONS THAT REQUIRE EMOTIONAL INVOLVEMENT**

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**Objectives:** The purpose of this study was to evaluate the correlation between nurses' and warders' levels of remuneration and the three dimensions of Burnout Syndrome: emotional exhaustion (EE), depersonalization (DP) and personal achievement (PA).

**Methods:** This was a descriptive, non experimental study, with a cross-sectional design, with focus on the net remuneration and Burnout Syndrome. Primary information was collected using voluntary, anonymous inquiry. The study covered 201 warders and 214 nurses. To compare the variables, the non parametric Chi Square ( $\chi^2$ ) test was applied, and for this a level of significance of 5% probability ( $P < 0.05$ ) was adopted. To measure the strength of bonds, Cramer's coefficient (V) or Spearman's coefficient (S) was used depending on the nature of information.

**Results:** Results have shown that the levels on all three scales of burnout syndrome depend, although slightly, on the net remuneration. Respondents receiving lower net remuneration had higher levels of emotional exhaustion compared to those receiving higher net wages ( $P_{EE}=0.032$ ;  $S_{EE}=-0.11$ ). As concerns depersonalization and personal achievement, the correlation is direct, i.e. respondents' dehumanization and level of personal satisfaction with work increased with the level of remuneration ( $P_{DP}=0,002$ ;  $S_{DP}=0.15$ ;  $P_{PA}=0,005$ ;  $S_{PA} =0.14$ ).

**Conclusion:** Low remuneration is a stressogenic factor that affects the development of burnout syndrome in occupations where the type of work is defined as emotional.



## THE INFLUENCE OF GENDER ON URGENT MENTAL HEALTH CONSULTATIONS

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**Objectives:** The results of the majority of the jobs indicates that women solicit help for their psychiatric problems at a higher rate than men, whatever the cause may be regardless of the geographic region where they live, from which it can be suggested that being a woman is a variable in higher usage of psychiatric services.

The object of this study is to observe is the gender variable supposes a difference in the number of urgent consultations, diagnosis, and hospital admissions that take place in our area hospital.

**Methods:** A total of 30,418 subjects were seen at our emergency unit between 2007 and 2013. Sociodemographic and clinical data were collected including: year and month of admission, gender, motive of consultation, diagnosis and hospital admission.

A retrospective analysis was performed. Chi-square was used to examine the association between two categorical variables (gender and diagnosis).

**Results:** A total of 30,418 patients were admitted, of which 47.4% were males and 52.6% were females. The proportion of each disorder in function of gender was:

	FEMALES	MALES	CHI-SQUARE
Anxiety disorder	62.8%	37.2%	( $\chi^2=238.231$ , $p<0.01$ ).
Depressive disorder	59.8%	40.2%	( $\chi^2=68.004$ , $p<0.01$ ).
Schizophrenia	39.9%	60.1%	( $\chi^2=333.884$ , $p<0.01$ ).
Personality disorders	62.0%	38.0%	( $\chi^2= 148.231$ , $p<0.01$ ).
Bipolar disorder	58.5%	41.5%	( $\chi^2= 18.252$ , $p<0.01$ ).
Substance use disorder	31.3%	68.7%	( $\chi^2= 388.369$ , $p<0.01$ ).

4,838 patients required hospitalization: 52.1% of patients hospitalized were males, while 47.9% were females, the proportion of each disorder being:

	FEMALES	MALES	CHI-SQUARE
Anxiety disorder	63.9%	36.1%	( $\chi^2=12,941$ , $p<0.01$ ).
Depressive disorder	53.6%	46.4%	( $\chi^2=6.008$ , $p<0.01$ ).
Schizophrenia	39.3%	60.7%	( $\chi^2=94.298$ , $p<0.01$ ).
Personality disorders	61.1%	38.9%	( $\chi^2= 46.231$ , $p<0.01$ ).
Bipolar disorder	58.8%	41.2%	( $\chi^2= 30.087$ , $p<0.01$ ).
Substance use disorder	33.7%	66.3%	( $\chi^2= 6.501$ , $p<0.01$ ).

**Conclusions:** The data obtained in our community are consistent with those obtained for other similar countries.

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## **INTERACTIVE ATLAS ON MENTAL HEALTH INEQUALITIES: THE CASE OF SCHIZOPHRENIA AND MOOD DISORDERS IN QUEBEC (CANADA)**

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Health inequalities are growing and exist across rich and poor countries. Health inequalities are even more pronounced for mental health problems. In order to transform existing empirical data into relevant and useful knowledge for informed decision in public health, the PRIMUS research group has conceptualized and developed an online Interactive Atlas on Health Inequalities (IAHI) based on user's needs assessments and data availability. Multidimensional data cubes store a large volume of aggregated administrative health data, census data and spatial data to answer interactively a wide array of possible queries using the IAHI. It provides health information at different spatial scales for specific populations with meaningful results displayed as tables, graphs or maps almost instantly. Designed explicitly to better understand health inequalities for chronic diseases including mental health problems, the IAHI offers relevant information on social and geographical health inequalities, in terms of prevalence/incidence of diseases, access to health care, treatments and health outcomes. For mental health problems the data cube includes 475 million registries (47Gb) for 950 000 patients suffering from schizophrenia or mood disorders. For example, users can visualize a strong variation (by a factor 5.5) in the prevalence of schizophrenia in 2004-2005 but a modest variation (by a factor 1.5) in the incidence of episodes of mood disorders for the same period between neighbourhoods according to their social and material deprivation index. The IAHI is a powerful tool to support for decision-makers in their effort to reduce the gaps between the less deprived population and the more deprived one.

## EFFECTS OF RURAL LIVING ON THE COGNITIVE EVALUATION OF ELDERERS

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**Objective:** Studies indicate connections between childhood and health in old ages. Early conditions of life may be related to factors of human growth thereby harboring states of child development in rural areas different from those in the urban ambience. Thus, our objective is: To evaluate the impact of rural origin on cognitive evaluation of elders living in an urban region.

**Methods:** Data are from SABE: a longitudinal survey in the city of São Paulo (Brazil) - 2000/2010. The explanatory variable “origin” was obtained from the question: "Have you lived in the countryside for more than five years before the age 15?" Control variables are sex, age (continuous), schooling and income. Outcome variable was “cognitive impairment”: people interviewed in 2010 with scores below the cut-point in the mini mental state examination (n = 196) or above (n = 1149).

**Results:** Cross sectional analysis in 2010 showed that the difference in the prevalence of cognitive impairment by origin was significant (Rural = 23.2%, Urban = 11.1%, Rao Scott test  $P < 0.001$ ). Longitudinal analysis was done with people who had no impairment at baseline re-evaluated in 2010. A Poisson regression assessed the association between “origin” and “cognition” in the presence of other variables, controlling for time of exposure. Significant variables were: rural origin (IRR = 1.74,  $P = 0.029$ ) and age (IRR=1.11,  $P < 0.001$ ).

**Conclusions:** Rural origin was an independent predictor of cognitive impairment after controlling for age, sex, income and schooling. Rural-urban inequality, even occurring only at young ages can lengthen differences through a person’s life, including an increased chance of cognitive impairment at old age.

## SUICIDAL BEHAVIORS AND NON-SUICIDAL SELF-INJURY IN COLLEGE STUDENTS – A SYSTEMATIC REVIEW

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**Objectives:** Self-injurious thoughts and behaviors (SITB) place a heavy burden on college students but so far, no systematic review on college student SITB has been performed.

**Methods:** A systematic review of electronic databases (MEDLINE, EMBASE, CINAHL, PSYCINFO and WEB OF SCIENCE) on SITB in college student samples between January 1980 and May 2013. We calculated median prevalence estimates of SITB and extracted all reported associations between SITB and risk and protective factors.

**Results:** We identified 56 samples (median sample size = 874; median response rate = 48%). Only 13% of samples were weighted for non-response bias. The median lifetime, past year, and current prevalence of suicidal ideations was 38.6%, 6.5% and 8.6%, respectively. Median lifetime and past year prevalence of suicide attempts was 3.4% and 1.1%. The median lifetime, past year and current prevalence of non-suicidal self-injury (NSSI) was 16.2%, 14.3% and 7.2%, respectively. Risk factors for suicidal ideations included being female (relative risk ratio (RRR) 3.2), being non-heterosexual (median aOR 3.0), maternal depression (median RRR 2.5), domestic violence (median RRR 4.0), a perceived need for help (aOR 4.4), or lack of social support (median RRR 4.4). Important risk factors for NSSI included being non-heterosexual (median aOR 3.4), previous NSSI (aOR 4.7), eating disorder (median aOR 1.8), high affective dysregulation (aOR 2.6), maternal depression (aOR 5.3), depression (median aOR 2.9), or a perceived need for help (aOR 1.9).

**Conclusions:** Past year median SITB in college students were lower compared with adolescent samples. This suggests college-specific protective effects, e.g. social peer support. However, over a period of 33 years, methodological high quality research on general as well as college-specific risk and protective factors remains sparse.

## THE EFFECT OF POSITIVE CHILDHOOD EXPERIENCES IN COLLEGE STUDENTS

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### Objectives

We investigated the effect of positive childhood experiences on the association between adverse childhood experiences and suicidality.

### Methods

We surveyed a random sample of 2,364 Belgian KULeuven freshmen (response rate 66.8%; mean age 19.1; 58.2% women) on childhood (< age 17) experiences. We administered 33 5-point Likert-type items adapted from validated measures (e.g. the Childhood Trauma Questionnaire). Principal component analysis identified 7 adverse and 3 protective factors. We ran multivariate logistic regression analyses with lifetime suicidality (i.e. suicidal ideation, plans, or attempts) as the dependent variable and gender, age, socio-economic status, lifetime mental disorders, childhood adverse and protective factors, and number of childhood adverse experiences as independent variables.

### Results

The most frequent childhood adversities were being bullied, emotional abuse by a family member and parental psychopathology (median percentage 39.8%, 9.4% and 8.6%, respectively). In a full logistic regression model ( $\chi^2=259.47$ ;  $df=20$ ;  $p<0.0001$ ;  $R^2=23.5\%$ ), being bullied (aOR 2.17), an abusive adolescent romantic relationship (aOR 2.13), lifetime internalizing disorders (aOR 2.47), and positive family experiences (aOR 0.62) remained associated with suicidality. Compared with positive peer or school experiences, positive family experiences were more protective against suicidality when experiencing emotional abuse by a family member (20% vs. 2-3% reduction in odds). Compared with positive family experiences, positive peer or school experiences were more protective when being bullied (11-12%, respectively, vs. no reduction in odds).

### Conclusions

We found that the environment (e.g. family or school) in which childhood adverse events are experienced (e.g. emotional abuse or bullying, respectively) may protect against suicidality by providing counteracting positive experiences. This has implications in the treatment and prevention of childhood suicidality, e.g. when determining the risk/benefit ratio of removing children from adverse environments.

## MENTAL HEALTH TREATMENT IN COLLEGE STUDENTS

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### Objectives

We investigated the effect of mental disorders and suicidality on mental health treatment in college students.

### Methods

We surveyed a random sample of 2,364 Belgian KULeuven freshmen (response rate 66.8%; mean age 19.1; 58.2% women) on the readiness to change mental problems, the readiness and barriers to seek treatment, and current treatment, using validated measures (Stages of Change Scale; Global Appraisal of Individual Needs Short Screener). We ran multivariate regression models with treatment as the dependent variable and age, gender, socio-economic status, 12-month mental disorders, and 12-month suicidality (i.e. suicidal ideation, plans, or attempts) as independent variables.

### Results

Overall, 2.5% of students were currently treated. For students with mental disorders or suicidality this was 3.3% and 15.3%, respectively. Students with internalizing mental disorders or suicidality were more likely to be currently treated (aOR 2.58 and 3.94, respectively). Older students, students with internalizing mental disorders, or suicidality were more ready to change their emotional problem (aOR 1.14, 1.19, and 1.94, respectively). Male students, students with externalizing mental disorders, substance use disorders, or suicidality were less ready to seek professional help for future emotional problems (aOR 0.84, 0.94, 0.93, and 0.78, respectively). The most important barriers to seek treatment were to rely on friends or relatives instead, to handle the problem on one's own, and to doubt the effectiveness of treatment.

### Conclusions

The rate of current mental health treatment in college students was comparable to rates found in the general population. There was a differential effect of gender, mental disorders, and suicidality on the attitude and use of mental health treatment. This points to the importance of tailoring treatment promotion strategies to specific subgroups, e.g. students with externalizing mental or substance use disorders.

## **PSYCHOLOGICAL PROBLEMS AMONG NURSING STUDENTS OF A HEALTH SCIENCE INSTITUTE FROM EASTERN NEPAL**

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### **Background:**

Existing literature (from other parts) demonstrates a high prevalence of psychological/ mental problems among nursing students. However, there is a scarcity of its data from Nepal.

### **Objectives:**

To measure the prevalence of psychiatric problems and to determine common stressors among nursing students

### **Methods:**

This is an institute based prevalence study carried out in B. P. Koirala Institute of Health Sciences (BPKIHS), Nepal during year 2011/12. This included all nursing students of certificate and bachelor programs of this institute as subjects. After informed written consent, the 'semi-structured proforma', the questionnaire 'GHQ 28' and the 'Gurmeet Singh's Presumptive stressful life events scale' were distributed to record socio-demographic plus clinical profiles and other information; to screen psychiatric disorder and to study the stressors respectively. The 'General Health Questionnaire 28' (GHQ 28) gives 'psychiatric caseness' to subjects with score  $\geq 4$ .

### **Results:**

All of the nursing students in BPKIHS are female. There were in certificate and in BSc nursing programs in different academic years. Majority were unmarried and of age less than 25 years. Among the respondents, majority were from urban settings and nuclear family. By the time of this submission, 151 responses out of 200 nursing students were collected. Among the enrolled subjects, 'psychiatric caseness' was present in 72 out of 151 (47.68%) subjects, with cut off of  $\geq 4$ . The most common stressful events reported from the list of 'Gurmeet Singh's Presumptive stressful life events scale' were related to exam, study and accommodation to institute life, average total score being 170.67 (minimum 0, maximum 706).

### **Conclusion:**

Many nursing students suffer from psychological problems and experience the stress, common stressor being related with nursing education.

## DEMAND ANALYSIS OF CARE IN A DAY HOSPITAL

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**Objectives:** The aim of this study is to determine the demand for care in Day Hospital from January to December 2013.

**Methods:** It is a cross-sectional study of a sample of 101 patients. We have studied the sociodemography and clinical-care variables. Data collection was collected retrospectively in computerized medical records. The data was analysed statistically using SPSS system.

**Results:** Data from mean age, gender, average stay and diagnosis appear on table 1. 29.7% show comorbidity, being associated most frequent diagnosis in these cases, personality disorder (9.9%).

When considering age as the principal diagnosis statistically significant differences was observed ( $p=0.005$ ), so that patients with an affective disorder have an average age of 46.63 years versus 28.50 years of patients with disordered eating behaviour and 32,88 years of those with psychosis.

	<b>Patients</b>
<b>Mean age (SD)</b>	42,5(11,74)
<b>Women(%)</b>	62,4%
<b>Average stay (SD)</b>	52,56(23,24)
<b>Diagnosis</b>	
<b>Affective disorder(%)</b>	45,5%
<b>Personality disorder(%)</b>	22,8%
<b>Anxiety disorder/adaptative(%)</b>	16,8%
<b>Psychosis(%)</b>	7,9%
<b>Other(%)</b>	7%

Table 1: Demographic and clinical characteristics of 101 patients

**Conclusions:** According to most studies, women and young people most often tend to seek help for their psychiatric problems. Hence it has been suggested that being a woman is a predictor of increased use of psychiatric services. The user profile of the Day Hospital is a person with a severe psychiatric disorder, and that requires intensive medical treatment with holistic approach.

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## **EPIDEMIOLOGICAL AND CLINICAL FEATURES OF PSYCHIATRIC PATIENTS ASSESSED IN A SPANISH PSYCHIATRIC EMERGENCY DEPARTMENT: ONE-YEAR ANALYSIS.**

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### **Objectives**

The number of patients being attended at Emergency Departments is continuously increasing, and approximately 15% of them have some psychiatric and/or behavioural symptoms. The aim of this study is providing us the best tools to recognize immediately the most typical features, in order to minimize undesirable results from inappropriate decisions in the psychiatric emergencies areas; and comparing results to previous studies.

### **Methods**

Revising retrospectively 1448 emergency department patient's visits attended at the Psychiatric Emergencies of our hospital, from around 300.000 citizens. Data were analyzed with a statistical program (SPSS), analyzing demographic characteristics (gender, age, marital status, urban or rural area, nationality, current occupation, social support) and clinical characteristics (symptoms, origin, past psychiatric, previous follow-up, psychiatric diagnosis, treatment, and what follow-up will be required if the patient is not placed in a supervised setting).

### **Results**

Most patients came outside from the hospital (58.68%) and on their own (not derived from a General Practitioner) (60.44%).

The "typical" patient is a Spanish (86.9%) woman (52.7%), not married (51.93%), not working (included disabled or pensioner) (59.46%), located in an urban area (62.8%). The 34.5% of them have one or more previous episode of psychiatric inpatient, and more than half (55%) were having psychiatric treatment. The primary diagnosis was "Minor mood disorder" (31.67%). The first option was discharging them (38.76%), note deriving to the specialist, and the second one was admitting them to an acute psychiatric unit (21%).

### **Conclusions**

Once being described the "average" patient, our results have some similarities and also some differences to other previous studies; thus we recommend future studies to clarify those discrepancies. For that, it could be quite interesting to register other features: which ones had self-harm or other-harm ideation, whether involuntary treatment was necessary or not, prevalence of substance abuse and even the readmission rate after 30 days.

## **HIKIKOMORI IN JAPANESE UNIVERSITY STUDENTS: A CASE STUDY OF 51 INDIVIDUALS WITH HIKIKOMORI**

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**Objectives:** The term “Hikikomori” is known as prolonged social withdrawal which is characteristic to adolescents and young adults who recluses in their homes and are combined in a persistent isolation. “Hikikomori” has spread in the 1990s and it has attracted social attention and concern in Japan. A Japanese government funded research group established guidelines for hikikomori. The hikikomori syndrome is defined as withdrawal from society for 6 months or longer by Japanese Ministry of Public Welfare. Recently, students dropping out university due to hikikomori have been increasing in Japan. We examined the psychiatric background of patients with hikikomori in Japanese university students.

**Methods:** We have retrospectively reviewed the clinical course of 51 patients with the hikikomori syndrome from 19 years old to 28 years old through medical records. There were 27 males and 24 females. We investigated 1. Age at the first psychiatric consult, 2.gender, 3.diagnosis based on the ICD-10, 4.duration of hikikomori, 5.history of self-harm, 6.main care giver, and 7.graduate or drop-out form university, respectively. According to the ending at the treatment, all the patients were allocated into 2 groups, A: graduates, B: drop-outs. We compared each item statistically between group A and group B.

**Results:** The total average at the onset of hikikomori was 22.1 years old. The total average duration of hikikomori was 18.5 months. Group A is composed of 33 patients. Group B is composed of 18 patients. There was a significant difference between group A and group B in age of the first visit.

**Conclusions:** The factors which effect prognosis of hikikomori were positive social support of the patients and appropriate treatment of psychiatric disorders.

## PSYCHIATRIC EMERGENCY CARE IN A SIDE EFFECTS PSYCOFARMACOLOGICAL

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### Objectives:

Drugs used in psychiatric practice, often have side effects related to its adherence to CNS receptors, neurotransmitter release and effects on the autonomic system. The improvement in the specificity of action and pharmacodynamic profile of new treatments has made these undesirable effects are minor in severity and frequency. However continue to be a matter of high importance in our daily clinical practice.

Our main objective in this study was to perform a descriptive analysis of psychiatric emergencies by side effects recorded in our hospital district.

### Methods:

From a total of 30,418 hospital emergencies recorded between January 1, 2007 and December 31, 2013, we selected the subjects who presented side effects. Sociodemographic and clinical data were collected including: diagnosis, year and month of admission, gender and, in case of side effects, the drug and the symptoms associated. A retrospective analysis was performed.

### Results:

1.2% (320) of all the emergencies in this period were related to side effects of medication. Regarding gender distribution 49.6% of patients who consulted were males compared to 51.4% females. The drug groups most associated with are antipsychotics, antidepressants and anxiolytics. The most common side effects are viewed extrapyramidal symptoms, followed by sedation, drowsiness and gastrointestinal effects.

### Conclusions:

Side effects of drugs used in psychiatric practice are one of the major problems for adherence and continuity of care. These effects represent the main cause of therapeutic failure and abandonment and therefore its care and management are an essential intervention in clinical and functional improvement in patients with mental illness.

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## **INSOMNIA IN EMERGENCY CARE PSYCHIATRY**

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### **Objectives**

In psychiatric clinical, insomnia is one of the most frequent causes of action in psychiatric emergency services. Insomnia may be a manifestation of multiple entities, from changes related to lifestyle, neurological diseases or psychiatric illness to interact with diverse organic pathology.

The main objective of this study was, in relation to insomnia in psychiatric emergencies, to review the demands carried out for this reason in a psychiatric unit of an urban tertiary care hospital.

### **Methods**

The Clinical Management Unit of the area of Psychiatry at our hospital provides mental healthcare services to the northwestern area of the province of Seville, with a population of 580,203 inhabitants.

From a total of 30,418 hospital emergencies recorded between January 1, 2007 and December 31, 2013, we selected the subjects who were presented insomnia.

Sociodemographic and clinical data were collected including: diagnosis, year and month of admission, gender and hospital admission.

A retrospective analysis was performed.

### **Results**

Of all the recorded consultations 2% (606) were associated with insomnia, ranging between 16.5 and 10.6% of annual emergencies. As to gender was observed that 53.1% were males and 46.9% females. The year with the highest number of consultations for insomnia was 2007. In the analyzed period, the month with the highest number of complaints of insomnia is August (except in 2010).

### **Conclusions**

Assessment of insomnia in emergencies is essential for the screening of severe psychiatric disorders (mainly affective and psychotic decompensation). It should not be a mere surface symptom assessment or stick exclusively to symptomatic treatment, but must include a complete examination of the patient, associated affective symptoms (especially suicidal ideation) and, in relation to the psychotic patient, evaluating other predictors of decompensation views early intervention for relapse.

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## PREVALENCE AND CORRELATES OF PSYCHIATRIC DISORDERS IN ADOLESCENTS IN GREATER BEIRUT

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**Objectives:** Population estimates of psychopathology among Lebanese adolescents remains scarce. This is the first study to investigate the prevalence and correlates of psychiatric disorders among adolescents living in Greater Beirut (Lebanon).

**Methods:** 510 adolescents aged 11 to 17 years and 11 months were recruited between March and December 2012, using a multi-stage cluster sampling technique. Both adolescents and their parents were administered a structured psychiatric interview, the *Development and Well Being Assessment*. Current diagnoses were confirmed by a child and adolescent psychiatrist and a psychologist using DSM-IV-TR criteria. Parents and adolescents also provided demographic data and filled out the Peer-Relations Questionnaire (PRQ).

**Results:** About 1 in 4 adolescents (26.1%) were diagnosed with at least one psychiatric disorder; more than half (55.6%) had only one diagnosis. Of the 510 adolescents, 13.2% were diagnosed with an anxiety disorder, 10.2% with attention deficit/hyperactivity disorder, 6.7% with a mood disorder, and 4.7% with conduct disorder or oppositional defiant disorder. Only 6% of diagnosed adolescents reported receiving professional mental health care. Adolescents whose parents were not married were more likely to have a diagnosis (48.8%) compared to those whose parents were married (24.0%) (OR=3.02, 95% CI [1.61, 5.71]). Adolescents whose both parents completed college were also 45% less likely to receive a diagnosis (17.7% versus 28.0%) (OR=0.55, 95% CI: [0.31, 0.97]). Adolescents with at least one psychiatric disorder scored higher on both the "Bullying" (Mean =2.00 ± 2.48) and "Victimized" (Mean=2.05 ± 2.41) subscales of the PRQ than those who did not (1.18 ±1.77 and 1.00 ± 1.60, respectively) (p<0.001).

**Conclusions:** One in four adolescents living in Greater Beirut suffers from at least one current psychiatric disorder. This prevalence is higher than what has been reported in more developed countries and appears to be driven by a higher prevalence of anxiety disorders.

## OBSERVED CHANGES IN HEALTH CARE DEMAND AND EVOLUTION IN A DAY HOSPITAL YEARS BETWEEN 1993 AND 2013

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### Objectives

Compare and analyze the main differences in the demand for services and care in clinical variables studied in 1993 and 2013.

### Methods

We have studied the sociodemographic, clinical care of 101 patients admitted in 2013 and 70 in 1993. Data collection was performed retrospectively at computerized medical records. Once collected the data was performed a comparative statistical analysis.

### Results

Data from admission rate, gender, mean age and diagnosis appear on table 1.

At high, there are currently more patients recovered (77,8% in 1993, 86,1% in 2013) and less impaired (13% in 1993, 3% in 2013), but increased 5% patients who have no change (5,8% in 1993, 10,9% in 2013).

At high incomes have decreased in acute inpatient units (12.9% in 1993, 3% in 2013) and increased referrals to mental health centers (77.1% in 1993, 91.1% in 2013 ).

	1993	2013
<b>Admisión rate (patients)</b>	70	101
<b>Women(%)</b>	45,7%	62,4%
<b>Mean age (SD)</b>	35(7,5)	42,5(11,74)
<b>Diagnosis</b>		
<b>Psychosis(%)</b>	21,6%	7,9%
<b>Affective disorder(%)</b>	24,9%	45,5%
<b>Personality disorder(%)</b>	22,7%	22,8%
<b>Anxiety/adaptative disorder(%)</b>	11,4%	16,8%
<b>Other</b>	19,4%	7%

Table 1: Demographic and clinical differences of patients in 1993 and 2013

### Conclusions

The profile of the patients attended a day hospital changes over the years, so it is desirable to monitor these changes to adapt to the actual demand of each time and improve quality of care.

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## **DESCRIPTIVE STUDY OF THE OUTPATIENT CONSULTS TO THE PSYCHOGERIATRIC PROGRAM IN A GENERAL HOSPITAL**

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### **OBJECTIVES**

The objective of this study is to describe the characteristics, reason for consultation and diagnosis, of the patients who were being attended in the psychogeriatric's program in the last year.

### **METHODS**

We took the information from data base of the patients attended the last year. We realized a statistical analysis with the SPSS 12 program.

### **RESULTS**

In total are 162 patients, which 70,4% of them are new patients. 15,6% of patients not were attended in the first date. Half of the patients are in the range from 70 to 79 years old. 76,5% of them was women. The outpatient consults most frequently comes from oncology and internal medicine (29% both). The reason for consultation most frequently was depression (51,2%) it was followed by behavioural disorders (13%). Affective disorders was the most frequently diagnosis (38,3%) followed by dementia (22,2%) and then adjustment disorders (12,3%). The percentage of patients who had no psychiatric diagnosis was 4.9%.

### **CONCLUSIONS**

The population attended is in mostly women and the reason for consultation and diagnosis that most frequently observed was affective disorders. Cognitive impairment was underdiagnosed, because it was diagnosed in only 3,7% of cases. After the evaluation, this percentage increases until 22,2%.

We observed a few cases of suicidal ideation (1,9%) and there was no suicidal ideation or suicidal intention during treatment on the program. This information could be related with the excellent adherence to the program. However this hypothesis needs more data and later studies.

## PREVALENCE OF RISK FACTORS FOR METABOLIC SYNDROME IN PATIENTS TREATED WITH PALIPERIDONE INJECTION.

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**OBJECTIVES:** To analyse the prevalence of risk factors for metabolic syndrome in a sample of outpatients treated with paliperidone injection.

**METHODS:** A cross-sectional descriptive studio was performed on a sample of 17 stable outpatients, which were diagnosed with Schizophrenia or Schizoaffective disorder and treated with Paliperidone injection. The 2005 IDF Criteria for Metabolic Syndrome were used to analyse the risk factors for metabolic syndrome. The collected data were: BMI, glycemia levels, lipid profile and blood pressure levels. 10 patients in the sample were men; 7 were women; the average age was 46,11 +/- 13,72 years.

**RESULTS:** We can resume:

- 76,47% has a BMI > 25 (29,41% women / 47,05% male).
- Lipid profile:
  - HDL <40 in males: 11,76% of the sample.
  - HDL <50 in women: 17,64% of the sample.
  - Triglycerides >150 in males: 17,64% of the sample.
  - Triglycerides >150 in women: 5,88% of the sample.
- High blood pressure in treatment: 11,76% (where 100% are women).
- Blood sugar profile: No alterations were observed.

**CONCLUSIONS:** There is a high prevalence of overweight in this sample, while there is no disturbance in the blood sugar profile. Furthermore, there is a low prevalence of high blood pressure. Concerning the lipid profile, a quarter of the sample shows altered HDL and triglycerides levels. However, our study presents certain methodological limitations due to a small sample, absence of control group and lack of lifestyle, diet and smoking habit data.

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## METHODOLOGICAL CHALLENGES TO UNDERTAKING A POPULATION-BASED CHILD MENTAL HEALTH SURVEY: THE CASE OF GREATER BEIRUT, LEBANON

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**Objectives:** This paper summarizes the main methodological challenges encountered during the first general population psychiatric disorders survey of adolescents residing in the Greater Beirut area.

**Methods:** A total of 9061 households were approached using a multi-stage proportionate cluster sampling technique. Within the eligible households, child assent was obtained following parental/legal guardian consent. The *Development and Well Being Assessment* (DAWBA) structured psychiatric interview, and the self-report *Strengths and Difficulties Questionnaire* (SDQ) were administered. Computer-generated psychiatric diagnoses were confirmed by a child and adolescent psychiatrist and a psychologist. Data collection took place between March and December 2012. Two attempts were made per household.

**Results:** Of the 9,061 households, 1,004 were eligible, of which 510 were completed interviews, 363 refusals, and the remaining either breakoffs or randomly selected child unavailable during both visits. An additional 3,517 households were identified as ineligible (e.g., apartment non-residential or no child fits age criterion). Quite importantly, 4,540 households were labeled as 'unknown eligibility' either because parents were not available (n= 132), field workers could not access the building (n=544), no one answered or opened the door (n=2,700), only the helper was present (n=711), parents refused before establishing age eligibility (n=421), or fieldworker could not tell if household qualified (n=32). Subsequently, the minimum response rate (RR) was 9%, [total completed interviews (n=510) divided by "all households except ineligible"], and the maximum RR was 51% assuming all households of "unknown eligibility" were ineligible. The more probable RR (22%), which assumes ratio of ineligibility to eligibility is 3.5 (3,517:1,004), varied across areas (10-32%).

**Conclusions:** Our RRs fall short of internationally reported estimates (46%-91%). Possible underlying reasons for the challenges faced and recommendations for future population-based child surveys will be presented and discussed.

## **ETHNOPSYCHIATRY: ONE-YEAR ANALYSIS IN THE PSYCHIATRIC WARD**

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### **Objective**

Our work stems from the need of a cultural framework along with a multi-axial diagnostic formulation when dealing with foreign patients. Several aspects must be taken into account,<sup>1</sup> such as cultural identities, cultural explanations of the diseases, evaluation of the cultural factors related to the psycho-social environment and, finally, a whole cultural evaluation in order to make a proper diagnosis and choose the appropriate treatment. The objective of our study is thus to analyze the specific features of foreign patients compared with Italian patients to improve our strategies to receive and treat them.

### **Methods**

We collected data on foreigner patients hospitalized in a psychiatric ward, from January 2013 to December 2013. We analyzed socio-epidemiological and diagnostic aspects, the reasons for the hospitalization, after discharge plans, both in the foreign and in the Italian populations.

### **Results**

The diagnosis of schizophrenia/psychosis was the most frequent, followed by mood disorders. Foreign patients more often were in the care of community mental health services before the hospitalization and were more often referred to therapeutic communities at discharge.

### **Conclusions**

In line with the literature,<sup>2</sup> what emerges from our results is that the presence of a cultural mediator during the interview with the patient is a key factor to better understand the clinical history of the patient and make a more appropriate diagnosis. Moreover what is fundamental is the creation of a wider social network that is able to receive the patient after discharge from the hospital.

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## DEVELOPMENT OF PSYCHIATRIC SYMPTOMS DURING ANTIVIRAL THERAPY FOR CHRONIC HEPATITIS C: A RETROSPECTIVE STUDY ON 590 SUBJECTS

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**Objectives:** Pegylated Interferon and Ribavirin (Peg-IFN+RBV) are the treatment backbone for HCV and may favour development of psychiatric symptoms (PS) that represent a possible cause of treatment drop-out. Sometimes, for these reasons, patients with a history of mental disorders (MD) are not included in Peg-IFN+RBV-based regimens. We investigated the prevalence of MD history and development of PS during Peg-IFN+RBV treatment in subjects with chronic hepatitis C (CHC).

**Methods:** retrospective records evaluation of 590 patients (pts) treated with Peg-IFN+RBV from 2005 to 2011 in a hepatology center with a psychiatric counseling.

**Results:** men were 53.6% and median age was 56 years (19-77). A MD history before treatment was present in 22.4% (132/590). Development of PS during therapy occurred in 67.9% and 43.4% of subjects with or without a MD history respectively ( $p=0.000$ ). Overall, 48.8% (288/590) developed the following PS: irritability (26.6%), sleep disorders (19%), depressed mood (17.7%), anxiety (10.9%), neurocognitive impairment (6%) and others (4.2%). Pts who ended therapy, based on response or stopping rules, were 94.6% (558/590) while only 5.4% dropped-out: 3.7% (22/590) for non-PS adverse events and 1.7% (10/590) for PS. In this last group 1% (6/590) had a MD history and 0.7% (4/590) not.

**Conclusions:** MD affect a large proportion of HCV-positive subjects. PS develop in about half of pts. Our experience seems to indicate that the occurrence of severe neurotoxic phenomena is not an absolute contraindication to continuation of antiviral therapy. In the presence of iatrogenic mental disorder, it is possible to continue the therapy with a specialist counseling and introduction of specific psychopharmacologic therapy.

**Key-words:** chronic hepatitis C, mental disorders, psychiatric symptoms, pegylated -interferon

## CAUSES OF DEATH IN AN ACUTE PSYCHIATRIC INPATIENT UNIT OF A PORTUGUESE GENERAL HOSPITAL

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**Objective:** Psychiatric patients are at increased risk of death from a number of natural and unnatural causes. This study aimed to examine the mortality causes of all psychiatric inpatients of an acute psychiatric ward at a general hospital in Portugal during the last 17 years. The inpatient unit has 29 beds and an average annual discharge rate of 500 patients.

**Methods:** A total of 21 inpatients died at the acute psychiatry inpatient unit between 1997 and 2013 (average 1,2 per year). These patients were studied retrospectively through case file review. Their demographic characteristics, medical and psychiatry diagnosis were collected and analyzed. Patients transferred to other medical wards during their admission were not included.

**Results:** Cardiovascular conditions were the most prevalent causes of natural death, affecting more than sixty percent of patients. These included: pulmonary embolism (n=6), acute stroke (n=3), cardiac dysrhythmia (n =2), acute myocardial infarction (n=1), abdominal aortic aneurysm rupture (n=1) and heart failure (n=1). There was one case of death for pneumonia and in 5 cases we couldn't establish the exact cause of death. During this period only one case of suicide was observed.

**Conclusions:** Cardiovascular conditions were the most frequent causes of death in our acute psychiatric inpatient unit. Even though suicide is difficult to prevent and predict and also a relatively rare event, continuing to improve our efforts remains important. Mortality studies are important for determining quality of health care and to create recommendations for preventive measures.

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## **PREDICTOR OF WELL-BEING FOR RESIDENTS OF AN EPIDEMIOLOGIC CATCHMENT AREA IN MONTREAL, CANADA**

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**Objective:** The aim of this study is to identify predictors of well-being, a positive indicator of mental health.

**Method:** We used data from the Epidemiological Catchment Area Study in Montreal, a longitudinal study that focuses on the mental health and wellbeing of residents in the southwest region of Montreal. The study recruited a randomly selected sample of 2,434 individuals between 15 and 65 years of age at T1, 1,303 of whom agreed to be re-interviewed four years later (T3). QOL was measured with Personal Well-being Index (Cummins, 2003). Direct interviews gathered self-reported data on: socio-demographic variables, life events, coping abilities, social support, perceptions of neighbourhoods, working status and income, mental disorders, psychiatric family history and mental health services utilization. Social and built features of the environment were determined using Geographic information System (GIS). Hierarchical linear regression, using a forward entry (for blocks of variables) and backward deletion procedure (for individual variables) was used to identify predictors of QOL at T2, among the aforementioned variables assessed at T1.

**Results:** The final model explains 41% of the variance of well-being. Eight blocks of variables and single variables were found to be significant predictors of well-being, including socio-demographics, income, stress and coping, social support, mental health status, satisfaction with precise life domains, satisfaction with the physical state of neighbourhood and the objective density of the vegetation in the neighbourhood and the average property values (GIS).

**Conclusion:** Better understanding predictors of well-being will enable the development of more effective mental health promotion programs.

## IMPACT OF LABOR ISSUES ARISING FROM THE ECONOMIC CRISIS IN MENTAL HEALTH.

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Several studies have demonstrated the influence that socio-economic conditions have on mental health. Given rising unemployment and worsening working conditions that the economic crisis which began in 2007 has caused, we have studied its impact.

**Objectives:** To analyze the possible existence of differences in the demand for medical care between 2005 and 2013, before and during the crisis, because of labor problems related to it, describing the nature of this conflict and its relationship with certain sociodemographic variables.

**Methods:** We have performed a systematic review of the people who sought care for the first time in a mental health center of the city of Madrid. The sample included 849 patients in 2005 and 739 in 2013. It has been analysed: complaint, life circumstances, gender, age, educational level, marital status and employment status, comparing both periods using Pearson's Chi-squared test.

**Results:** In 2005, 17.4 % of patients related their symptoms with a work problem, while in 2013 was 15.1%, without finding significant difference with a  $p = 0.3$ . In 2005, 63.5% were female and 36.5 % were men. In 2013, 59.8% were women and 40.2% were men. With a  $p = 0.54$ , we can not say that there is a significant difference in the demand by sex between both periods. In 2005, 30.4% at the time of consultation was on sick leave, while in 2013 it was 9%.

**Conclusions:** According to the results, there has been no change in the demand caused by labor issues between the two periods. No sex differences have been found. In both periods, women have consulted more. Regarding the employment situation in 2005, more patients consulted while on sick leave.

## RECURRENT SUBTHRESHOLD DEPRESSION IN TYPE 2 DIABETES: AN IMPORTANT RISK FACTOR FOR POOR HEALTH OUTCOMES

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**Objectives:** To evaluate the association between recurrent subthreshold depressive episodes and functioning in a prospective community sample of people with type 2 diabetes.

**Methods:** A prospective community study in Quebec, Canada, was carried out between 2008 and 2013 (n=1064). Five yearly follow-up assessments (telephone interviews) were conducted. Baseline and the first three follow-up assessments were used to identify recurrent subthreshold depressive episodes (PHQ-9). Functioning (WHODAS-II) and health related quality of life (CDC unhealthy days) at four and five years follow up assessment were the outcome measures.

**Results:** Nearly half of the participants suffered from at least one episode of subthreshold depressive symptoms. After adjusting for potentially confounding factors, the risk of poor functioning/ impaired health related quality was nearly three times higher (RR=2.86) for participants with four subthreshold depressive episodes compared to participants with no/minimal depression. Results suggest a dose-response relationship: the risk of poor functioning/ impaired health related quality increased with the number of recurrent subthreshold depressive episodes even after controlling for potentially confounding variables (significant linear trend,  $p < 0.001$ ).

**Conclusions:** Recurrent subthreshold depressive symptoms might be an important risk factor for poor health outcomes in type 2 diabetes. Early identification, monitoring and treatment of recurrent subthreshold depressive symptoms might improve functioning and quality of life in people with type 2 diabetes.

## EPIDEMIOLOGICAL STUDY OF EMERGENCY PSYCHIATRIC CARE IN A GREEK GENERAL HOSPITAL

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**Objectives:** To identify and categorize mental disorders examined in the Psychiatric Emergency Care, as a part of deinstitutionalization in primary care.

**Methods:** The study involved 1482 patients that voluntary came for evaluation of 01/01/13 to 31/12/13. 745 (50.3%) men, 737 (49.7%) women, of which 91.8% (N = 1361) were Greek. Chi square and independent samples t test were applied to the sample. Statistical analysis was performed using SPSS 21.

**Results:** Nineteen diagnoses were recorded according to ICD-10. 386(26%) of the patients had psychoses, 285(19.2%) anxiety disorders, 490(33.1%) affective disorders, 36(2.4%) personality disorders, 152(10.3%) substance dependence, 12(0.8%) developmental disorders, 38(2.6%) organic diseases, 53(3.6%) organic psychosyndromes and 29(2%) were without psychopathology. Of them, 41 (2.8 %) refused the proposed treatment (medication). There was a statistically significant difference in relation to gender and disorder ( $\chi^2 = 71.9$   $p = .001$ ). The proposed therapy was hospitalization for 556(37.5%) and medication for 582(39.3 %). For the remaining patients (23.2%) the proposed treatment was psychotherapy (3.8%), counseling (4.5%), combined therapy (medication & psychotherapy 5%) while the rest were referenced to another specialist or another hospital. There were statistically significant differences between gender and diagnosis (Fisher= 74.8  $p = .001$ ) and gender and age ( $F = 24.04$   $p = .001$ ), and between age and the type of treatment ( $F = 4.0245$   $p = .001$ ) and ethnicity ( $t = 5.657$   $p = .001$ ).

**Conclusions:** The number of people presenting to primary care psychiatry is large, with diverse diagnoses, covering a wide range of psychopathology and helps deinstitutionalization with different types of treatment while hospitalization is no longer the biggest part of the rehabilitation procedure in mentally ill people.



## HAZARDOUS DRIVING: ASSOCIATIONS WITH SUBSTANCE USE, MENTAL HEALTH AND LIFETIME TRAUMATIC BRAIN INJURY

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### Abstract

**Objective:** We examined the associations between three measures of hazardous driving and psychiatric factors including substance use, mental health and lifetime traumatic brain injury among a general population sample of Canadian adults.

**Method:** Data are based on a subsample of the 2011 and 2012 CAMH Monitor telephone survey of adults aged 18 and older in the province of Ontario (N=3,635). Hazardous driving was assessed using self-reports of past 12 months collision involvement, driving after drinking and driving after cannabis use. Substance use was assessed by self-reported number of drinks consumed per day, frequency of cannabis use, and non-medical use of prescription opioid pain relievers. A measure of mental health, probable anxiety and mood disorder, was defined as a score of 4 or more on the 12-item General Health Questionnaire (GHQ12). Lifetime traumatic brain injury was assessed using self-reports of a hit to the head that resulted in loss of consciousness for at least five minutes or at least one night of hospitalization due to head injury symptoms.

**Results:** Univariate analyses revealed that all three measures of hazardous driving behaviour, collision involvement, driving after drinking and driving after cannabis use, were significantly associated with frequency of cannabis use, probable anxiety and mood disorder and lifetime traumatic brain injury. Driving after drinking and driving after cannabis use were also significantly associated with number of drinks consumed per day.

**Conclusions:** These results suggest that psychiatric factors contribute to self-reported hazardous driving. Additional research to confirm these relationships and to identify causal pathways is needed.

Table 1. Prevalence of collision involvement, driving after drinking and driving after cannabis use by demographic characteristics, substance use, mental health and traumatic brain injury measures: *CAMH Monitor*, 2011-2012

	Collision involvement		Driving after drinking		Driving after cannabis use	
	N	yes%	N	yes%	N	yes%
Total	3470	6.1	3633	5.3	3635	1.8
<b>Sex</b>				***		
male	1460	6.1	1503	9.4	1503	2.4
female	2010	6.1	2130	1.5	2132	1.4
<b>Age</b>		**				***
18-34	478	8.5	501	6.4	501	5.1
35-54	1297	6.8	1340	5.4	1342	1.0
55+	1629	3.4	1714	4.8	1714	0.5
<b>Marital status</b>		*				***
Married/partner	2269	5.2	2347	5.2	2348	0.9
Previously married	707	5.9	754	5.9	755	1.0
Never married	462	8.7	499	5.8	499	5.5
<b>Income<sup>a</sup></b>		*		***		
<\$30,000	317	5.8	351	0.8	352	2.3
\$30,000-\$49,999	444	8.1	465	3.0	466	1.7
\$50,000-\$79,999	673	6.0	699	5.6	699	1.9
\$80,000+	1264	5.9	1288	7.9	1288	2.5
Don't know/Refused	772	5.6	830	2.9	830	0.6
<b>Kilometres driven - typical week mean (SD)</b>				*		
Yes	163	377.1 (536.7)	171	428.3 (658.1)	41	372.7 (249.1)
No	2905	291.4 (459.7)	2883	288.2 (446.4)	3015	295.0 (469.2)
<b>Number of drinks/day<sup>b</sup></b>				***		***
None to < 1	2777	6.2	2917	2.8	2919	1.1
1 – 1.999	393	5.4	406	12.1	406	4.2
2 – 2.999	151	2.8	155	17.9	155	2.6
3 or more	107	11.8	107	31.5	107	12.6
<b>Cannabis use – last 12 months</b>		**		**		***
Never to Less than once a month	3287	5.8	3442	4.7	3443	0.3
Once a week or less	84	4.4	82	14.9	82	15.3
More than once a week	79	17.5	82	16.9	83	35.4
<b>Non-medical use of prescribed opioids<sup>c</sup></b>				***		***
No	3370	6.0	3523	5.0	3525	1.6
yes	88	11.3	97	19.6	97	10.7
<b>Anxiety and Mood Disorder<sup>d</sup></b>		**				
No	3153	5.6	3294	5.3	3295	1.7
Yes	316	10.9	338	6.0	339	3.2
<b>Lifetime traumatic brain injury<sup>e</sup></b>		*		**		**
No	2910	5.5	3057	4.9	3058	1.5
yes	560	9.2	576	7.5	577	3.8

Notes: CAMH=Centre for Addiction and Mental Health; <sup>a</sup> Canadian dollars; <sup>b</sup> Derived from the product of usual number of drinks consumed by frequency of drinking in the past 12 months; <sup>c</sup> past year use of opioid pain relievers (e.g., Percocet, Percodan, Tylenol-3, Demerol, OxyContin, codeine); <sup>d</sup> reporting at least 4 of the 12 symptoms on the GHQ12 scale; <sup>e</sup> any head injury that resulted in loss of consciousness for at least five minutes or at least one night of hospitalization; Statistical significance: \*\*\* p < 0.001; \*\* p < 0.01; \* p < .05.

## **STUDY OF EPIDIMIOLOGIC AND DEMOGRAHRIC FACTORS IN COMPLETED SUICIDES BY CHILDREN AND ADOLESCENTS OF NAGPUR, INDIA**

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**OBJECTIVES:** To study the epidemiology of suicide among children and adolescents in Nagpur district of Maharashtra. To compare suicides in Nagpur versus global findings. To compare the findings between the suicides amongst two different ages( Under 18 years and Above 18 years)

**METHOD:** Data was collected from five Daily News Papers of Nagpur city from January 2011 to Dec 2013 in a structured form . Further completed for missing information by calling the case in-charge Police Department. The data was organized area, age and gender wise and then subjected for statistical analysis. Complete population distribution of Nagpur city was procured from the Department of Public welfare, Nagpur Municipal Corporation.

**OBSERVATIONS:** Population of Nagpur City(2.14 million). Total Suicides reported in Nagpur from Jan 2011 to Dec 2013 by 5yrs to 90 years of age(Total=1338;M=873,F=465). Under 18 years (Total=161; M=53, F=108), 19yrs to 24yrs(Total=302;M=162,F=150), 25yrs to 30yrs(Total=253;M=166,F=87).

**RESULTS:** The suicide rate appears to be rising every year (statistically not significant) from 2011 to 2013 but the prevalence of 20.3 is significantly ( $p<.005$ ) higher than global and national figures. Significantly higher incidence is found among younger students of Nagpur( 11.9 per 100000 at  $p<.005$ ) and girls are committing twice as many times as boys in the age group of 5to 18 years. Girls under 18 years is the academic stress and failures in examination as the highest rated.

**CONCLUSIONS:** Suicide rate (20.3) is more in the city of Nagpur for all age groups. Students under 18 years show very high incidence(11.9) of suicide in this city. Girls have the highest suicide rate in under 18 age group. Suicide rate above 18 age group gradually shifts higher on boys side. Significant academic stress, poor in exam results and relational problems are expressed.

## **IDENTIFYING TYPOLOGIES OF CHILDHOOD ADVERSITY IN THE NORTHERN IRELAND STUDY OF HEALTH AND STRESS (NISHS): ASSESSING MENTAL HEALTH AND SUICIDAL OUTCOMES**

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**Objectives:** To utilize nationally representative Northern Irish data to 1. assess poly-victimization across 12 independent childhood adversities and 2. determine associations between childhood adversity classes and subsequent mental health and suicidal outcomes.

**Methods:** The current study utilized data from a multi-stage, clustered, area probability household study of DSM mental disorders and suicidality in a Northern Irish population ( $N=4,340$ ; response rate, 68.4%); the Northern Ireland Study of Health and Stress (NISHS). The NISHS utilized the Composite International Diagnostic Interview (CIDI) to assess mental disorders and suicidality. In addition, respondents were queried in relation to 12 separate childhood adversities including indicators of maltreatment, parental maladjustment, parental loss, and economic adversity. Latent Class Analysis (LCA) was used to uncover poly-victimization typologies across the childhood adversities. Binary Logistic Regression models were utilized in which the adversity typologies were entered as the independent variables and a series of potential outcome variables, such as mental disorder and suicidality, were entered as dependent variables.

**Results:** LCA resulted in 4 discrete typologies of childhood adversities. Binary Logistic Regression models indicated that individuals from typologies characterized by a greater degree of adversity were more likely to report negative mental health and suicidal outcomes compared to typologies reporting fewer adversities. Important differences were demonstrated across typologies.

**Conclusions:** A proportion of individuals experience co-occurring childhood adversities and these individuals are at increased risk for mental disorder and suicidality. These findings have important implications for prevention, intervention, and treatment planning.

## **OBESITY AND METABOLIC SYNDROME IN PATIENTS WITH BIPOLAR DISORDER**

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### **OBJECTIVES**

Schizophrenia has associated traditionally with major rates of comorbilidad physics. In addition the antipsychotic ones of the second generation are causers of the metabolic syndrome (increase of weight, dislipemia and diabetes) that could favor directly the cardiovascular disease.

We show the following objectives: To develop a therapeutic plan to diminish the mortality and morbidity of schizophrenic patients. To detect the factors of risk, which influence the metabolic syndrome. To apply measures of prevention.

### **METHODS**

Retrospective study is realized, checking the clinical histories of the patients beginning medication with aripiprazol for symptomatology psychotic and support the treatment at least 6 months later.

We realized preventive specific measures including education to the patient, careful selection of the antipsychotic with substitution if there appear signs of metabolic syndrome evaluation of the helping medication.

We evaluated lipidic index, IMC, glycemia and hipercolesterolemia. We apply the measures of prevention to diabetes, to arterial hypertension and to dislipemia.

### **RESULTS**

There were 39 patients that initiated treatment with aripiprazol (therapeutic doses). The 61,54 % of patients is smoking; the 46,16 % has an IMC > 25. The 28,39 % hipertriglicerinemias, 12,82 % index of glycemia basal > 125mg/dl and the 15,38 % hipercolesterolemia.

### **CONCLUSIONS**

The antipsychotic atypical alter the metabolic regulation. The treatment with aripiprazol suggests minor risk of metabolic syndrome, in relation to previous similar studies, with antipsychotic others. We think it performs vital importance the prevention of the overweight orientated to patients with the first psychotic episode.

## **IDENTIFYING PROFILES OF ADVERSITY FROM CHILDHOOD AND CONFLICT RELATED TRAUMAS: MENTAL HEALTH OUTCOME IN NORTHERN IRELAND**

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**Objectives:** The current study utilized data from a multi-stage, clustered, area probability household study of DSM mental disorders in the Northern Irish population (N=4,340, response rate 68.4%); the Northern Ireland Study of Health and Stress (NISHS) to 1. assess co-occurrence across childhood adversities and 12 conflict related traumas and 2. to investigate the relationship between adversity profiles and subsequent mental health disorders, including Posttraumatic Stress disorder, Depression, and Suicidality.

**Methods:** The NISHS utilized the Composite International Diagnostic Interview (CIDI) to assess mental health disorders and associated risk factors. Respondents were queried in relation to 12 separate childhood adversities including indicators of maltreatment, parental maladjustment, parental loss, and economic adversity. Twelve conflict related traumas were additionally surveyed, including witnessing atrocities and combat experience. Latent Class Analysis (LCA) was used to assess the co-occurrence of adversities across childhood and conflict related traumas. Binary Logistic Regression models were implemented to determine associations between adversity profiles and subsequent mental health outcomes.

**Results:** LCA uncovered 4 discrete adversity profiles. Binary Logistic Regression models indicated that individuals from more prominent adversity profiles were more likely to report negative mental health outcomes compared to less prominent adversity profiles.

**Conclusions:** Adversity was shown to co-occur across both childhood events and conflict related events. A greater degree of adverse experiences was associated with more negative outcome with regard mental health and suicide. This suggests that for a proportion of individuals, childhood and conflict related adversities co-occur and this co-occurrence relates to subsequent psychiatric morbidity.

## **EPIDEMIOLOGY AND CHARACTERISTICS OF PSYCHIATRIC CONSULTATION IN A GENERAL PUBLIC HOSPITAL**

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### **Objectives**

To describe the epidemiology and characteristics of adults, between 18 and 65 years old, who have been admitted in the medical and surgical departments in a general hospital during one year, and for whom psychiatric assessment and treatment has been requested.

### **Methods**

Data from the psychiatric care provided during 2013 were obtained from the “12 de Octubre” hospital Consultation Liaison Unit records. Demographic and diagnosis data were processed using descriptive statistical analysis.

### **Results**

The Consultation Liaison Unit carried out 397 new interventions during 2013. The most frequent psychiatric pathologies treated were: Mood Disorders 23,4%; Abuse Substances Related Disorders 19,1%. Adaptive Disorders 18,9%; Psychotic Disorders 9,1%; Organic Disorders 8,3%; Personality Disorders 7,8%. Suicidal tentative had been presented by 54 patients (13,6%).

### **Conclusions**

The psychiatric assessment and treatment of patients admitted in a general hospital due to medical and surgical conditions represent a considerable number of cases and an important demand on medical and surgical services. Most of the cases seen are resolved in collaboration with doctors of such services during the hospitalization process. This leads to improving the patients welfare and to a better and faster recovery.

Despite the limitations of a cross-sectional study, the knowledge on demographic data and clinical characteristics of the demands on the Consultation Liaison Units provides key data for the creation of streamlined management strategies for these units.

## **TITLE: PSYCHOLOGICAL NEEDS IN PRIMARY CARE**

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### **INTRODUCTION:**

An increase in demands of Common Mental Disorders has occurred during the last years. These represented the 25,5% of the Adult Primary Care demand in 1989, and it grew up to the 60% in 2005. A 40,06% of the derivations attended in Community Mental Health Center were related to stressful life situations (Z codes as described in CIE-10). As a result of the scene, Severe Mental Disorders could be suffering a worse mental health attendance. A psychological approach in Primary Care Centres has been proposed as a way of solving the growing demand of Common Mental Health Disorders in an effective way. In this work, psychological demand is analysed during 2 months rotation in a Primary Care Center by a Clinical Psychology Intern Resident.

### **OBJECTIVES:**

1. Analyse psychological needs in Primary Care Attention.
2. Show possible approaches to respond to this demand.
3. Describe problems found in the organization/derivation system.

### **METHODOLOGY:**

Derivations made to the Intern Resident in Clinical Psychology were analysed in terms of demand made (patient perspective) and type of psychological intervention proposal. As more than a third of the derivations were lost cases, organizational difficulties were also registered and categorized.

All the variables (demand, intervention proposed and type of organizational difficulties) were qualitative, so categories were built to be able to quantify them.

### **RESULTS:**

29 derivations/referrals were done during 2 months.

1. Type of demand. From the 29 derivations: 10 of them were lost cases; 6 were related to laboral problems; 5 were due to helper burnout; 4 were couple relational problems; 2 were insomnia problems; 1 was an anticipated mourning; 1 was a coping disease problem.
2. Intervention proposal. From the 19 attended cases: 9 were given a groupal psychological approach (two groups were made: one for people with laboral problems, another one for women with helper burnout), 4 people received individual psychotherapy approach; 4 cases received psychological advice; 1 case was approached in a combined way (groupal psychotherapy plus one individual session); 1 case was derivated to specialized attention.
3. Organizational difficulties. 10 cases were lost: 4 of them were not able to get in contact; 4 cases were not attended; 2 did not have a psychological demand. Apart from those 10 cases there were another 3, in which several proposals were made at the same time to solve the problem.



## CHARACTERISTICS OF READMITTED PATIENTS IN A PSYCHIATRIC UNIT ALONG TWO YEARS

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### Objectives:

- To describe the characteristics of readmitted psychiatric patients in our Psychiatric Unit from the Emergency Department of the Hospital 12 de Octubre, throughout 2012 and 2013.
- To assess the causes of these readmissions.

### Methods:

- This is a retrospective, descriptive study. We use the database of the Emergency Department of the Hospital 12 de Octubre.
- From the medical records we obtained the sociodemographic data, the drug abuse history, the number of hospitalizations, the length of the stay and the main diagnosis.

### Results:

During 2012 there were a total of 571 hospitalizations, 83 patients were readmitted at least once, and the total number of readmissions was 115. The readmissions rate was 20.14%. The rate of patients who were readmitted at least once was 18.20%. During 2013 there were a total of 559 hospitalizations, 87 patients were readmitted at least once, and the total number of readmissions was 112. The readmissions rate was 20.03%. The rate of patients who were readmitted at least once was 19.46%.

### Conclusions:

There are a significant number of patients readmitted during the year through the Emergency Department. These patients can be grouped into primary diagnosis, sex, age, toxic consumption and social status, presenting these groups different readmission rates.

**References:** Rosca P, et al. Rehospitalizations among psychiatric patients whose first admission was involuntary: a 10-year follow-up. *Isr J Psychiatry Relat Sci.* 2006;43:57-64.

## **EFFICACY OF GERMAN PSYCHIATRIC OUTPATIENT CLINICS- THE CASE OF A RURAL OUTPATIENT CLINIC IN SOUTH GERMANY**

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**Objectives:** In Germany, ambulatory psychiatric care is dichotomous: office-based psychiatric assistance by private psychiatrists (PP) funded by the public (90% of patients), and psychiatric outpatient clinics (POC) (10%) underlying statutory duties because of treating severely chronically mentally ill people. In this study, we examine: i) whether POCs are able to control psychiatric admissions; ii) whether POCs indeed take care of severely impaired patients, and iii) whether there are clinical, social and care profile differences in patients treated by POCs compared with those treated by PP.

**Method:** i) time series for routine data corresponding to 9 years on 35,372 patients; ii) sectional analysis for the year 2010 on 1,672 patients; iii) comparative study (POC vs. PP) of 200 patients (year 2011) on the basis of standardized assessment instruments. Statistics: Chi-square tests, univariate ANOVA, multivariate regression analysis, polynomial regression plots, logistic regression analysis, robust Prais-Winsten regression analysis for time series.

**Results:** i) Over the surveyed period of nine years, cumulative LOS and readmission figures decreased; number of admissions, cumulative LOS, and readmission figures were negatively associated with number of outpatients treated, which increased over surveyed period. ii) Average CGI was high, the mean GAF was low, a third of sample showed as least one suicide attempt in past, a fourth showed a metabolic comorbidity; patients with borderline, schizoaffective, obsessive, bipolar, and schizophrenic disorder was paid more attention. iii) Patients treated by POC are overall more impaired and show a disadvantageous social profile.

**Conclusions:** Community-oriented ambulatory care on the basis of multidisciplinary assertive teams is able to reduce readmissions and cumulative length of stay, even after conclusion of deinstitutionalization process. German POCs seem to fulfill the statutory duties by treating severely chronically mentally ill patients. Clinical, social and care profiles of POC patients show more severe impairment than those treated by PP.

## **RELATIONSHIP BETWEEN THE INCIDENCE OF VIOLENCE IN EMERGENCY MEDICAL SERVICES AND TYPE OF ASSISTANCE PROVIDED**

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### **Background**

Several studies have shown that the emergency medical services, along with those of psychiatry, are susceptible to significant levels of violence but it is not clear whether the type of assistance provided (hospital or pre-hospital) is related to this phenomenon.

### **Objectives**

To determine the risk of violent episodes within the emergency services of a Regional Health Service and to identify a relationship between the types of assistance provided and a higher perceived risk of violence.

### **Methods**

The study setting was the Emergency Medical Service of a regional health service (South-eastern Spain) which includes 8 hospitals providing emergency medical services and 11 mobile emergency units. The POPAS questionnaire was translated into Spanish and adapted according to the type of emergency services provided in order to measure perception of 12 different types of violence. The response scale included the number of annual episodes, identifying the main aggressor (Patient / family member or colleague). The questionnaire was directly given to all healthcare personnel within both services and was returned anonymously. In order to avoid bias, extreme values (>80th percentile) were excluded and also those workers with less than one years experience.

Results: 516 healthcare workers replied. Of these, 390 fulfilled the study inclusion criteria. The number of annual violent episodes perceived by all workers merged from 6.8 (non-threatening verbal aggression) to 0.01 (severe physical aggression). The main exponent in all types of aggression was either the patient or a family member (82.5%). Episodes of demeaning treatment and incitement to disharmony were significantly more frequent within the emergency hospital service whereas those from the mobile emergency units were more likely to suffer physical violence, - threats (p

### **Conclusions**

Episodes of violence are increasingly common phenomena in the emergency services, especially the verbal type. The main protagonist of the aggression is, for all forms of violence, either the patient or family. Nevertheless, the type of violence is associated with the type of assistance provided.

Psychological violence is more common in emergency hospital service, whereas mobile emergency units are more likely to suffer physical violence.

## **IMPACTO PSICOSOCIAL DE LA ENFERMEDAD DE ALZHEIMER EN EL SIGLO XXI: SUS ALCANCES EPIDÉMICOS, SU DETECCIÓN TEMPRANA Y SUS RECURSOS TERAPÉUTICOS**

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Aún con los grandes avances de la Medicina, las Neurociencias y la Farmacología, hoy, a más de 100 años de la primer descripción de la enfermedad de Alzheimer, los trastornos mentales provocados por esta enfermedad, lejos de atenuarse o disminuir, no solo han aumentado enormemente su número de apariciones, sino que sus síntomas siguen siendo cada vez más graves e invalidantes. Sus formas clínicas, su severo pronóstico, su malignidad y evolución, todavía no han podido modificarse.

La intención de esta presentación, es compartir los conceptos que hacen que en la actualidad debamos considerar a la enfermedad de Alzheimer como la **nueva epidemia del siglo XXI**. Así analizamos sus actuales formas de presentación, sus posibles comorbilidades, la consulta enmascarada de muchos síntomas que pueden, en algunos casos, ser la expresión de un incipiente déficit o las manifestaciones iniciales de un deterioro cognitivo que se transforme posteriormente en una franca demencia, que terminará con la destrucción total del aparato psíquico de una persona.

Desde esta perspectiva, consideramos que es nuestra responsabilidad médica, conjuntamente con todo un equipo multidisciplinario de trabajadores de la salud, emplear las herramientas necesarias para estar siempre alerta en **la detección precoz de los trastornos de la memoria**, como uno de los primeros signos de alarma, en que debemos siempre intervenir en forma temprana, a tiempo para identificar precozmente esta cruel enfermedad y así tener mayores posibilidades de eficacia y éxito terapéutico, para al menos, enlentecer el proceso degenerativo y prolongar la calidad de vida de la persona afectada.

## **BEING LINKED TO A COMMUNITY MENTAL HEALTH TEAM INFLUENCES ON THE ADMISSIONS AT ACUTE PSYCHIATRIC UNIT?**

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### **OBJECTIVES**

Describe if there are differences on the patient's admissions at an acute psychiatric unit (APU) depending on if they are being followed up or not in a community mental health team (CMHT).

### **METHODS**

Cross-sectional retrospective study including all patients of Santa Coloma de Gramenet's area admitted at the APU of CAEM's Hospital in 2013 (n=194). We divided the sample in two groups (linked and unlinked patients) depending on if patients were being followed-up or not in the CMHT. We analyzed sociodemographic data (age and gender) and clinical data: days of hospitalisation, modality of admission (voluntary/involuntary), type of admission (urgent/programmed), main diagnosis (severe/not severe) and number of admissions (only one/two or more).

### **RESULTS**

In 2013, 194 patients were admitted to APU and there was a total of 280 hospitalisations. 55,7% of admitted patients weren't linked to the CMHT (n=108) while 44,3% were linked (n=86). In linked patients we found a statistically significant higher rate of severe main diagnosis (82,6% Vs 64,8%, p=0,001) and a higher proportion of programmed admissions (25,2% Vs 5,2%, p<0,001). In unlinked patients we obtained a statistically significant higher rate of non severe disorders (35,2% Vs 17,4%, p=0.001). No difference were found in the other variables studied.

### **CONCLUSIONS**

There was a bigger number of hospitalisations in the group of patients unlinked to CMHT. We found a higher rate of admissions of patients with non severe main diagnosis in unlinked patients. This result suggests that when patients with less severe disorders aren't followed-up at CMHT they may require more admissions. Surprisingly we didn't found differences in mean days of hospitalisation between both groups, although in literature it has been described a reduction in hospital stay of patients followed-up in a CMHT [1].

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## PSYCHIATRIC MORBIDITY AMONG CAREGIVERS OF SCHIZOPHRENIA PATIENTS

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**Objective:** To assess mental health status of the caregivers of schizophrenia patients.

**Methods:** This descriptive cross sectional study was done in the outpatient and inpatient department of National Institute of Mental Health (NIMH), Dhaka, Bangladesh from September 2010 to February 2011. A semi-structured Questionnaire and General Health Questionnaire (GHQ-28) were applied to the caregivers of schizophrenia patients who fulfilled the inclusion criteria. Among the respondents whose GHQ-28 score were 4 or above Structured Clinical Interview for DSM-IV I Non Patient (SCID-I/NP) version were applied to identify psychiatric disorders among the caregivers of schizophrenia.

**Results:** Out of 272 respondents most of them were female (88.97%), housewife (72.42%) of 21 to 50 yrs age (80.51%). In this study 22.3% of respondents were suffering from different types of mental disorders. Among them major depressive disorder were most prevalent (11.8%). Other psychiatric disorders were found generalized anxiety disorder (4.8%), pain disorder (2.9%). Less common were panic disorder, social phobia, adjustment disorder and undifferentiated somatoform disorder (0.7% in each type).

**Conclusions:** Significant proportions of the caregiver of schizophrenic patients were suffering from psychiatric disorders who did not get any psychiatric treatment. So the service providers, policy makers and planners should address the issue carefully. Further broad based study is recommended in this regard.

## **SIMILAR INCREASE IN PSYCHIATRIC HOSPITALIZATIONS FOR A 2-YEAR PERIOD: A RETROSPECTIVE STUDY**

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**OBJECTIVE:** Psychiatric admission rates are not homogeneous during the year. In our hospital we observed a particularly prominent admissions peak during the month of June, consistently repeated for the last two years. The aim of this study was to evaluate the different characteristics of these periodic increases in the number of hospitalisations

**METHODS:** A total of 170 admissions from 03.06.2012 to 08.07.2012 (86) and 11.06.2013 to 09.07.2013 (84) were retrospectively evaluated. Data collected were age, sex, provenance, admission type, reason, country of origin, education and profession, employment, marital and social status, number of hospitalizations, suicidal risk and diagnosis, including substance use.

**RESULTS:** As most relevant results, age showed a similar prevalence for 2012 and 2013, standing out the 30-39 (32.2 vs 23.4%) and 40-49 years old (26.7 vs 31.2%) groups. Half of the patients arrived from the psychiatric emergency unit and one quarter from ambulatory facilities. Two thirds were voluntarily admitted, and the most common reasons for hospitalization were auto or hetero-aggressive risk (42.2 vs 44.7%) followed by psychotic episodes (27.8 vs 12.8%). On 2012 men and women were equally represented, while for 2013 a slight female predominance was observed. Almost half of the patients were single and one third divorced. Almost half of them were living alone. First psychiatric hospitalization accounted for 33.3 vs 24.4 % of the sample. Substance use was present in 64.3 vs 70.3% at admission, with tobacco and alcohol as most commonly used. The most frequent diagnosis were substance-induced disorders (34.8 vs 33.3 %), followed by psychotic disorders (24.7 vs 17.9%) and personality disorders (23.6 vs 17.9%).

**CONCLUSIONS:** Results were equivalent for both years, excluding sex, involuntary basis, psychotic symptoms and tobacco and alcohol consumption. The high prevalence of substance-induced disorders and psychotic disorders may suggest the need to develop specific preventive measures for those patients.

## **RISK FACTORS FOR MATERNAL DEPRESSIVE SYMPTOM TRAJECTORIES FROM PREGNANCY TO FIVE YEARS LATER: OUTCOMES FROM THE EDEN MOTHER-CHILD COHORT IN FRANCE**

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### **Objectives**

Depression is a common mental disorder among women in the childbearing age and increasingly recognized as a public health problem affecting not only women but also their children. Identifying women who experience depression and addressing their needs may help reduce the burden of early behavioral problems in children.

The study aims to (a) identify symptom trajectories of depression in a population-based sample of French mothers from 24 weeks pregnancy to when their children were aged 5 years, and (b) identify socio demographic, psychosocial and psychological risk factors associated with trajectory membership.

### **Methods**

Data from 1,807 French women participating in the EDEN mother-child longitudinal cohort study were analyzed using growth trajectory models, a group-based semi-parametric method which makes it possible to identify distinct clusters of individual trajectories within the population. In the second stage of analysis, multinomial logistic analyses were performed to investigate the associations between the potential risk factors and trajectory class membership.

### **Results**

We identified five trajectories of maternal depressive symptoms: (1) no symptoms, (2) high symptoms in pregnancy, (3) intermediate depressive symptom levels, (4) high symptoms in the child's preschool period and (5) chronic high depressive symptoms. Socio demographic risk factors that were associated with trajectory membership were low family socioeconomic position and financial difficulties. Psychosocial risk factors were partner substance abuse, domestic violence, stressful life events and poor self-reported health status. Psychological risk factors were having a past history of depression, anxiety in pregnancy and experience of childhood adversity.

### **Conclusions**

This research identifies risk factors that may predispose mothers to distinct trajectories of depressive symptoms. As especially women with intermediate levels of depression often go unnoticed by health care professionals, sensitizing primary care providers to this group may offer opportunities for early identification and targeted early intervention.



## **DRINK AND DRIVE IN BRAZIL: CHANGES BETWEEN 2006 AND 2012**

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**Introduction:** Despite of Brazil's remarkable economic development during the last decade, traffic accidents are still one of the main causes of death, with around 35,000 people. In 2007 policy makers had already shown interest in tackling this issue reviewing the law code leading to more severe penalties.

**Objectives:** We compared the rates of drinking and drive before and after this change in the Brazilian legislation.

**Method:** The 2006 and 2012 Brazilian National Alcohol Surveys (BNAS) were organized by the National Institute of Alcohol and Drug Policy (INPAD) of the Federal University of Sao Paulo (UNIFESP). They used a probability multistage cluster sample designs to select 7614 Brazilians 14 years of age and older from the household population of Brazil (N=3007, resp rate=66% in 2006 and N=4607, resp rate=77% in 2012). Both surveys consisted in a combination of instruments assessing alcohol, tobacco and illegal drug use as well as mental disorders and other potential risk factors. The second wave of the survey allowed the comparison of all major indicators of substance use over a 6 years period. We assessed alcohol consumption patterns and drinking and drive behaviours between the two surveys. Stata 11.2 was used to estimate weighted prevalence rates in both waves.

**Preliminary results:** The rates of being in a car with a driver who had drunk too much decreased from 35% to 31% among adults and from 29% to 18% among adolescents between 2006 and 2012. In 2006 38% of the participants holding a drivers' license drove at least once after drinking against 32% in 2012.

**Conclusion:** Even though the population favoured the change, this initial move failed to provoke improvements in public attitude or behaviour, due most probably to the complete lack of enforcement put into place at the time. The young population seems to embrace the change more completely.

## **THE IMPACT OF CULTURE ON THE PERCEPTIONS ABOUT MENTAL HEALTH HELP AND TREATMENT IN ALGERIA.**

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The aim of this work consists to determine the impact of culture on the perceptions about mental health help and treatment so as to promote the offer of care in Algiers City.

We have estimated, based on epidemiologic study, the perceptions regarding sources of help and treatment options of mental disorder in general population of Algiers city.

In Algiers, an epidemiological study has been carried in the framework of an investigation entitled "Mental Health in a General Population: Realities and Images". In this study we have orally interviewed 900 individuals aged 18 and above, they were stratified from a representative sample of algerian population.

The results showed the following findings:

- 1- The pharmacological view of mental health care
- 2- The predominance of psychiatric clinics over other possible therapies
- 3- The limited place of general doctors
- 4- The leading role of the family in mental health care.
- 5- The reference to the traditional therapies hasn't been suggested very much.

Cultural invariants have been identified and some recommendations have been proposed to improve mental health care system within Algiers City.

## **ASSESSMENT OF BURNOUT SYNDROME ON PSYCHIATRISTS IN THE PRIVATE AND PUBLIC SECTOR DURING THE FISCAL AUSTERITY IN GREECE**

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**Objectives:** Burnout Syndrome (BS) commonly threatens health professionals' well-being and has been described as a prolonged response to chronic job stressors, although it has not been widely researched on psychiatrists. The aim of this research is to investigate the levels of job burnout and its determining factors in psychiatrists working in the private and public sector in Greece, taking into account demographic characteristics and features of type of work.

**Methods:** Maslach Burnout Inventory (MBI) was used as a research tool, which was administered to 185 psychiatrists, and the final sample consisted of 141 psychiatrists (response rate 76,2%). Total BS score and scores of BS subscales (Personal Accomplishments-PA, Emotional Exhaustion-EE and Depersonalization-D) were calculated. Parametric tests (t-test, one-way ANOVA and Pearson correlation test) were performed to assess statistical significant relationships regarding demographic and job-related features.

**Results:** 9,9% of psychiatrists display job burnout, 14,9% emotional exhaustion, 23,4% depersonalization and 20,6% low personal achievements. Mean scores of BS subscales were also found relatively low (PA=36.00, EE=18.42, D=6.78). Age affects all three factors of burnout and years in service and type of work influence emotional exhaustion. Monthly income adversely affects depersonalization ( $p=0.001$ ), while gender and educational level have no effect on any burnout dimension. Statistically significant relationship was reported between PA and income course during the last three years ( $p=0.002$ ).

**Conclusions:** Psychiatrists do not form an occupational group particularly vulnerable to job burnout, probably due to high perceived achievements during the exercise of their profession.

## **PSYCHIATRIC SECTORIZATION IN TUNISIA: PSYCHIATRISTS OPINION**

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### **Objectives:**

We aimed to assess the psychiatric sectorization system in Tunisia.

### **Methods:**

Transverse descriptive study which took place in psychiatric hospital Razi in Tunisia. We passed a self-administered questionnaire on 30 tunisian psychiatrists. The questionnaire was composed of 11 items.

### **Results:**

20 psychiatrists (66.66%) thought that sectorization has improved mental health management .Main advantages were continuity of medical care by the same medical team (26.66%), better care organization and orientation (20.00%). However, 76.66% of Tunisian psychiatrists criticized current sectorization model in Tunisia and 73.33% of them found it have to be reviewed .53.33% emphasized the lack of regional psychiatry centers and for70.00 % of practitioners, sectorization failed to achieve medical care proximity. Moreover, 16.66% of them pointed out inequitable sectors distribution.

### **Conclusion:**

Generally, despite of some benefits, Tunisian psychiatrists think that actual sectorization model is insufficient. Many features should be reviewed in order to carry out the main objectives and principles.

## DEMOGRAPHIC AND DIAGNOSTIC CORRELATES OF NEED FOR INPATIENT PSYCHIATRIC TREATMENT

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**Objectives.** We examined demographic and diagnostic correlates of the use of inpatient psychiatric services to evaluate local therapeutic needs of specific patient groups.

**Methods.** Clinical files of 429 patients from last 2 years in a semi-rural hospital in Canada were examined to compile an electronic file including the number of psychiatric admission, length of hospital stay, diagnosis, and each patient's demographic data (age, gender, marital status, and education). The age ranged from 15 to 92 years (average at 39.7, SD=17.5). The sample consisted of 207 women and 222 males. The proportions of largest diagnostic categories (with overlap) were as follows: 43.6 % mood disorder, 19.6% personality disorder, 19.1% substance abuse, 18.4% schizophrenia, 11.4% impulse disorder, 8.9% anxiety disorder, 5.8 % delirium, and 5.4% adjustment disorder.

**Results.** The average number of hospital admissions in the last 2 years was 0.6 (SD=0.8) per registered psychiatric patient. The length of stay ranged from 0 to 87 days with the average at 10.4 days (SD=10.0). To avoid irrelevant statistics, we report only Pearson rs at both  $p < .01$  and at least  $r > .19$ . To our surprise, neither length of stay nor the number of hospital admissions in the last 2 years correlated with age, gender, education, and marital status. Of the diagnostic categories, only schizophrenia was associated with longer hospital stay and also with more admissions over lifetime.

**Conclusions.** Only schizophrenia was significantly associated with longer and more frequent hospital admissions. Demographic variables had no relevant impact.

## **PSYCHIATRIC COMORBIDITY IN GENERAL HOSPITAL ADMISSIONS: IMPACT ON MORTALITY AND LENGTH OF STAY**

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3. CINTESIS – Center for Research in Health Technologies and Information Systems

### **Objectives**

In the present study our aim was to assess the impact of psychiatric comorbidity in general hospital admissions mortality and length of stay. We further intended to analyze which factors could account for such relation.

### **Methods**

All inpatient admissions in public Portuguese hospitals from year 2000 to 2010 were included. A centralized nationwide database was analyzed. We defined a broad psychiatric comorbidity group and a narrow psychiatric comorbidity group, which included only uncontested psychiatric diagnostic categories. We performed unadjusted and adjusted analyses for confounders such as age, sex and comorbidity index. For adjusted analyses, linear and logistic regression models were used.

### **Results**

A total of 8.372.349 (100%) admissions were included. Of these, 870.524 (10,4%) had at least one “broad” psychiatric comorbidity and 241.564 (2,9%) had at least one “narrow” psychiatric diagnosis. After adjustment, admitted patients with a “broad” and “narrow” psychiatric comorbidity associated with a 40% (CI: 40-41%) and 39% (CI: 39-40%). increase in the length of stay, respectively. In terms of mortality, specific psychiatric comorbidities, such as anxiety disorders, were associated with lower mortality (OR: 0,64; CI: 0,60-0,68), while others were associated with higher mortality, such as schizophrenia (OR: 1,39; CI: 1,33-1,46). Non-psychiatric comorbid disorders explained partially this differences, as admitted patients with a psychiatric comorbidity had a higher prevalence of almost every analyzed comorbidities.

### **Conclusions**

The presence of a psychiatric comorbidity is associated with a substantial increase in length of stay in general hospital admissions. Psychiatric comorbidities are heterogeneously associated with mortality, as some psychiatric comorbidities are associated with significantly higher mortality while others are associated with lower mortality rates. Observed differences persisted after adjustment for confounders and further research is warranted to understand unexplained differences.

## **THE INFLUENCE OF PARENTAL PSYCHOPATHOLOGY ON OFFSPRING SUICIDALITY IN THE SAO PAULO METROPOLITAN AREA, BRAZIL**

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**Objectives.** Suicide is a major public health concern, and understanding the predictors of progression along the suicide continuum may help reduce its incidence and burden. Suicidality tends to occur in families, and parental mental disorders may predict distinct stages in the pathway to suicide. This study aims to explore the association between parental psychopathology and offspring suicidality in the Sao Paulo Metropolitan Area.

**Methods.** Data are derived from a cross-sectional household study with a representative sample of 5,037 adults living in the Sao Paulo Metropolitan Area. We used survival models to examine bivariate and multivariate associations between a range of parental disorders and offspring suicidal ideation, plans and attempts.

**Results.** After controlling for comorbidity, number of mental disorders and offspring psychopathology, generalized anxiety and antisocial personality predicted offspring lifetime suicidal ideation (OR 1.8 and 1.9); panic and generalized anxiety predicted lifetime suicidal attempts (OR 2.3 and 2.7); and panic predicted the transition from ideation to attempts (OR 2.7). There was a dose-response relationship between number of parental disorders and offspring suicidality. When we considered specific lifecycle periods, generalized anxiety predicted suicidal attempts during childhood (OR 64.7). Among teenagers, parental depression and antisocial personality predicted suicidal ideation (OR 5.1 and 3.2); depression, panic, generalized anxiety and substance abuse predicted suicidal attempts (OR 3.2, 3.8, 3.3 and 1.7); and panic disorder predicted transition from ideation to attempts (OR 3.7). During young adulthood, generalized anxiety remained as the only predictor of ideation (OR 3.6) and attempts (OR 3.7).

**Conclusion.** Parental disorders characterized by impulsive-aggression and anxiety-agitation are the main predictors of suicidal thoughts and behaviors in residents of the Sao Paulo Metropolitan Area. This intergenerational transmission of suicide risk is independent of the occurrence of mental disorders in the offspring and may be related to the transmission of subclinical psychopathological traits.

## **SHARED AND UNIQUE FACTORS BETWEEN METABOLIC SYNDROME AND MILD PSYCHIATRIC DISORDERS: A LONGITUDINAL POPULATION-BASED STUDY INITIATED BY LANCEED HOSPITAL, TAIWAN**

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**Objectives:** Cardiovascular disease (CVD) and depressive disorders are the most two harmful problems for human health in the 21st century. The relationships between the two diseases are complicated, yet the mechanisms are not clear so far. As metabolic syndrome (MS) and mild psychiatric disorder (MPD) are good indicators for CVD and depressive disorders, respectively, this study aims at clarifying shared and unique factors between MS and MPD by using the 8-year follow-up Landseed cohort.

**Methods:** A total of 5712 community residents were followed-up and analyzed. The point prevalence rates of MS and MPD and their comorbidity rate were estimated by each wave. Three multiple logistic regression models, with each treating MS, MPD, and comorbid condition as dependent variable, were compared to identify the shared and unique factors. Variables specifically correlate with MS or MPD are defined as unique factors; whilst those correlated with both MS and MPD or with comorbid condition as shared factors.

**Results:** The point prevalence rates of MS ranged 13.83-14.26%, MPD ranged 17.17-19.60%, and comorbidity rates 2.75-3.07% in three waves. Educational level and weekly exercise frequency are shared factors of MS and MPD. Moderate frequency of weekly exercise protects the occurrence of MS and MPD. Moderate personal income is a unique protective factor for MS; and male and abstaining from alcohol use are unique protective factors for MPD.

**Conclusions:** A balanced life style is beneficial for both physical and psychological health. Specifically, there are no dose-response effects between weekly exercise frequency and MS or MPD. Too much is as bad as not enough. It is important for clinicians and health educators to educate community people to engage in exercise in a proper way to improve public health.



## NEUROLOGICAL EFFECTS of RADIOFREQUENCY RADIATION

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### Objectives

This study is a review of recent studies on the effects of radiofrequency (RF) radiation on neuronal functions and their implication on learning and memory in animal studies, effects on electrical activity of the brain and relation to cognitive functions. Also it includes studies reporting subjective experience (fatigue, headache, dizziness, and sleep disturbance, etc) in humans exposed to RF.

In the recent few years, the extensive use of wireless technologies such as mobile phones raises the question of possible health effects of the RF radiation, in particular on neural functions, because of their use in close vicinity to the human brain.

### Methods

This study is a summary of the research literature on the neurological effects of RF exposure published between 2007-2013. In particular, we examined new data on (1) dosimetry and exposure assessment, (2) neurological effects of RF fields. Epidemiological studies of the RF exposure, particularly from wireless technologies, were determined, along with human and animal studies of neurological and behavioural effects. Where additional information is relevant, some earlier papers, or papers not specifically related to neurological effects, are also included.

### Results and Conclusions.

In this study, analyses show that publications showing effects are more than no effects with the recent neurological literature. In summary, the new neurological effect studies due to RF exposure studies report that 67% show effects and 33% do not show effects.

Different parameters of RF exposure, such as intensity of the radiation, frequency, duration, waveform, frequency- and amplitude-modulation, etc, are important determinants of biological responses and affect the shape of the dose-response relationship curve. In order to understand the possible health effects of exposure to RF from mobile telephones, one needs first to understand the effects of these different parameters and how they interact with each other.

## DEMOGRAPHICS OF PSYCHIATRIC INPATIENTS, LENGTH OF STAY AND READMISSIONS OVER TIME IN A PORTUGUESE GENERAL HOSPITAL – A 13 YEAR RETROSPECTIVE STUDY

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**Objectives:** Management of psychiatric patients has changed in the last years. As a result of deinstitutionalization and the investment in the outpatient care, the length of inpatient stay at psychiatric hospitals has decreased.<sup>1</sup> This decrease in the length of stay has been associated with an increase in the readmission rates.<sup>2</sup> Aging of psychiatric population may add new challenges, such as a change in diagnosis frequency and its clinical management. Thus, the aim of the present study was to describe the demographics and pattern of inpatients stay (such as length of stay and readmissions), in a general's hospital psychiatry ward from 2000 to 2013.

**Methods:** Hospitalization data were obtained from the WebGDH program and statistical analysis was made using SPSS17. All data and results are preliminary and only descriptive statistics from the years 2000 and 2013 are presented in this abstract.

**Results:** There were 404 hospitalizations on the psychiatric ward in 2000 and 773 in 2013. In 2000, May was the month with more admissions 11.6%; in 2013, July was the month with more admissions 10.7%, followed by May with 10.4%. Male inpatients represented 43,1% of the total inpatients in 2000, and 47,1% in 2013. The mean age of the inpatients was 39.7 in 2000 and 45.2 in 2013. Mean length of stay was 24.0 with a maximum of 88 days in 2010 and 16.3 with a maximum of 308 in 2013. In 2000, 10.1% patients were admitted more than once versus 13.2% in 2013. The frequency of the main ICD10 diagnosis groups was similar between 2000 and 2013.

**Conclusions:** Preliminary results show that although demographics of inpatients and pattern of stay changed over time, the distribution of diagnosis is the same. Thus, these changes may depend on other factors such as a modification in clinical practice or financial limitations.

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## **GENDER DIFFERENCE AND THE PREVALENCE OF AUTISM IN ADULTHOOD**

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### **Objectives**

Until now autism was usually thought of as a childhood disorder in male children with intellectual difficulties. Until recently, information on the epidemiology of autism was entirely based on childhood studies. We have already reported the prevalence of autism spectrum disorders (ASD) in a household survey of adults in England in 2007\*, but many adults with intellectual disability were excluded from this survey by design. Our objective was to derive nationally representative estimates of the prevalence of autism in adults of all ability levels in England.

### **Methods**

We combined standardised assessments from the third national survey of psychiatric morbidity in adults in England, with those from a survey of adults with intellectual disability, sampled from intellectual disability case registers. Data were postweighted to represent the English adult population by age, sex, type of residence and intellectual ability. Adults were interviewed from age 16 upwards (no upper age limit).

### **Results**

There were 7274 participants aged 18 years and over in the third national survey of psychiatric morbidity and 290 participants in the intellectual disability case register study. The prevalence of autism in adults at all ability levels in England was 11/1000 (95% CI 3-19/1000). Prevalence of autism greatly increased in those with moderate to profound intellectual disability (odds ratio 63.5; 95% CI 27.4-147.2). Adjusted odds ratios for autism by male sex were 1.3(95% CI 0.5-3.0) for those with moderate to profound intellectual disability, compared to 8.5 (95% CI 2.0-34.9) in those with mild or no intellectual disability, this interaction being statistically significant ( $p=0.03$ ). There was no more than a slight reduction in the prevalence of autism with increasing age.

### **Conclusion**

Although autism is more prevalent in adults with intellectual disability, most adults with autism do not fall within the intellectual disability group. Gender differences for autism were not found in the intellectual disability part of the population; this raises a concern that there may be a considerable number of women in the non intellectually disabled general population with autism who are undiagnosed or misdiagnosed.

\* Brugha TS, McManus S, Bankart J, Scott F, Purdon S, Smith J, et al. Epidemiology of autism spectrum disorders in adults in the community in England. *Arch Gen Psychiatry* 2011 May;68(5):459-65.

## **COMMON MENTAL DISORDER AMONG MEDICAL STUDENTS OF THE TWO MEDICINE COURSES: A CROSS SECTIONAL STUDY**

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**OBJECTIVES:** Estimate the Common Mental Disorder (CMD) prevalence and its associated factors among medical students.

**METHODS:** A cross-sectional study in February 2014, applied to all the students of the third semester from two medicine courses of a public university in northeast Brazil. One of the courses used the traditional teaching model (School X) whereas the other one (School Y), the PBL teaching model (Problem-Based Learning). School X has 52 years of history, while the Y School has just 3 years. They answered a semi-structured questionnaire on social-demographic, psycho-emotional characteristics and, educational process and also was accomplished applying the Self Reporting Questionnaire-20 (SRQ-20). The chi squared test was performed to evaluate the prevalence of CMD. The confidence interval (CI) to 95% was estimated by bootstrap technique based on 1000 samples with replacement of 40 students.

**RESULT:** Each of the two courses had 45 students enrolled, but Only 38 students from School X and School Y 40 answered the questionnaire. Y School students were 45% women, 47.5% of students live alone or with colleagues and have mean age of  $24.5 \pm 5.5$ . 30% were satisfied with the teaching strategies and 52.2% of students when classes were missing was because diseases. While 39,5% of students of the School X were women, 10.5% of students live alone or with colleagues and have mean age of  $22.2 \pm 2.2$ . 18.4% were satisfied with the teaching strategies and 52.6% of students when classes were missing was to study for exams. The prevalence of CMD was 60% among students of Y School (95% CI 43.9-74.2) and 50% on the X School (95% CI 33.3-65.2).

**CONCLUSION:** The prevalence of CMD was high in the two different models of Medical Schools. The results suggest the necessity of teach-learning process changes and the establishment of a preventive mental health program for medical students.

## DEPRESSION AMONG MEDICAL STUDENTS FROM COUNTRIES OF CENTRAL AND WESTERN EUROPE

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**Objectives:** Depression is a serious problem which also affects medical students. The aim of the study was to compare the level of depression among medical students from European countries.

**Methods:** Students from different countries of Europe were asked to fill in an electronic form containing the Beck Depression Inventory (the BDI). The form was created separately for each country, using official translation of the BDI, approved by the competent psychiatric association. The study group were medical students. The control group were students of engineering. The study was performed between X–XII 2013. Google-Drive software was used for the electronic form and Statisticav10 for statistical analysis.

**Results:** The form was filled in by 1580 students from 5 countries. The study group: Poland 310, Portugal 206, Spain 220, France 200, Germany 261. The control group: Poland 383. The average score of the BDI in the study group: Poland 13,2+/-9,6; Portugal 7,5+/-7,8; Spain 7,5+/-8,1; France 11,2+/-7,2; Germany 8,1+/-7,2. The average score of the BDI in the control group: Poland 12,2+/-9,5. There were significant differences ( $p < 0.05$ ) between groups in terms of the average score of the BDI. The number of the BDI results  $\geq 10$  in the study group: Poland 182 (58,7%), Portugal 57 (27,7%), Spain 60 (27,3%), France 104 (52,0%), Germany 90 (34,5%). The number of the BDI results  $\geq 10$  in the control group: Poland 202 (52,7%). The number of the BDI results  $\geq 20$  in the study group: Poland 73 (23,5%), Portugal 16 (7,8%), Spain 20 (9,1%), France 41 (20,5%), Germany 17 (6,5%). The number of the BDI results  $\geq 20$  in the control group: Poland 77 (20,1%). There were significant differences ( $p < 0.05$ ) between groups in terms of the percentage results of the BDI.

**Conclusions:** Depression is a serious problem among students regardless the part of the world they are studying. A proper monitoring of depression is required and appropriate help for those who suffer from it.

**References:** Beck AT, (June 1961). "An inventory for measuring depression". Arch.Gen.Psychiatry

## **RISKS OF ALL-CAUSE AND SUICIDE MORTALITY IN PSYCHIATRIC DISORDERS: A META-REVIEW**

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### **Objectives**

A meta-review, or review of systematic reviews, was conducted to investigate the risks of all-cause and suicide mortality in major psychiatric disorders.

### **Methods**

A systematic search generated 407 relevant reviews, of which 20 reported mortality risks in 21 different psychiatric disorders and included around 1.7 million patients and over a quarter of a million deaths.

### **Results**

All disorders had an increased risk of all-cause mortality compared with the general population, and many had mortality risks larger than or comparable to heavy smoking. Those with the highest all-cause mortality ratios were substance use disorders and anorexia. These higher mortality risks translate into substantial (10-20 years) reductions in life expectancy. The diagnostic pattern for suicide risk was different to that for all-cause mortality: borderline personality disorder, anorexia, depression, and bipolar disorder had the highest suicide risks. We outline gaps in the review literature exist including for all-cause mortality in bipolar disorder, personality disorders, and anxiety disorders. Typically, the quality of the included reviews was low.

### **Conclusions**

Risks of mortality and suicide in all mental disorders are substantially raised compared with the general population. These excess risks justify a higher priority for the research, prevention, and treatment of the determinants of premature death in psychiatric patients.

## **WPA-0128 ASSESSING HEALTH NEEDS OF PRIMARY CAREGIVERS OF CHILDREN WITH INTELLECTUAL DISABILITY: A COMPARATIVE STUDY**

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### **Introduction:**

According to the World Health Organization 3% of the world population has some form of intellectual disability. Pilot studies have shown notably high incidence rates of Intellectual Disabilities in Pakistan. The main objective of this study was to identify the health needs of the primary caregivers of the intellectually disabled children in Karachi, Pakistan.

### **Methods:**

A cross-sectional study with a structured questionnaire was designed and primary caregivers (n=170) were selected and interviewed with the help of school representative in four areas of Karachi, Pakistan during Jan to Jun 2013.

### **Results:**

The major findings of the study indicate that the health needs of primary caregivers of children with intellectual disability are greater than those of primary caregivers of typically developing children. Care giving for children with intellectual disability had a negative impact on psychological wellbeing and physical health of the caregivers. Anxiety and depression scores were found to be significantly higher. Primary caregivers of intellectually disabled children also reported a high incidence of back pain. Caregivers shared their concerns and important insights regarding aspects contributing negatively and positively to their health. Praying was highlighted as a major personal coping mechanism and children's daily activity needs and behavioral issues were reported as major stressors.

### **Conclusion:**

The primary caregivers of intellectually disabled children experience depression and their psychological morbidity is high. Interventions addressing the health needs of the primary caregivers of disabled children will be of benefit not only to the primary caregivers but also to their children and families in turn.

## **WPA-0220 WORKING FOR A SOCIALLY INVOLVED PSYCHOTHERAPY -SIP-**

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Bearing in mind that the sphere of psychotherapy is crossed by Public Health, and considering psychotherapeutic models owed a critical perspective that contemplates the diverse ways in which socio-historical, political and economic factors configure subjective pain -or psychopathology-, this study aims to develop and propose a Socially Involved Psychotherapy -SIP-, whose main axes includes an integration of diverse knowledge and psychotherapeutic tools -principally from cognitive and systemic approaches-, the outline of Primary Health Care, human rights perspective and contributions of Extended Clinic.

Keywords: Psychotherapy, Human Rights perspective, Public Health, Primary Health Care.



## WPA-0232 PSYCHOLOGICAL STATUS OF MEDICAL SCIENCES STUDENTS

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**Introduction:** Students of universities are the future creators, elites and effective decision makers in the youth. Recognizing psychological status and its problems can be effective in the development of policies and strategies of universities. This study aimed to determine mental status in the students of Medical Sciences in 2013 and its relationship to their demographic characteristics

**Method:** In this descriptive study, 321 of the students of Urmia University of Medical Sciences in IRAN were studied by using SCL90-R questionnaire on admission time to the University. Data analysis using descriptive statistics and significance level ( $P=0/05$ ) was performed.

**Results:** 91% of Students' age was less than 20 years and 68.8% were female, 78.2 percent were living in the dormitory. Fields of medicine, environmental health and nursing consisted the largest number of students. 93.8% of students were in normal mental health, 91.9% of any anxiety disorder, 96/1% were without serious disturbance in the obsessive mood, 92.2% percent without any disrupting the dumps, 90.7% without the paranoid thoughts. In this study, no significant difference in the mean scores in the mental status with concerning about the future of profession, being worried about future career and academic progression status, were observed.

**Conclusion:** The results of this study showed that a number of students seriously suffer from mental disorders such as depression, anxiety and obsessive and paranoid thoughts. Identification severity and types of the disruptions can be effective in prevention and treatment of these disorders.

**Key words:** Psychological Status, Students, Medical Sciences, IRAN

## **WPA-0256 MENTAL DISORDERS AMONG OBESE PATIENTS SEEKING BARIATRIC SURGERY**

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**Background:** Obesity and mental disorders are burdensome health problems commonly observed in general population and clinical samples. However, non-standardized assessment and small size of the sample might hamper conclusions of the investigations.

**Objective:** To estimate, through standardized interview, the frequency of mental disorders and correlated factors among obese patients seeking bariatric surgery.

**Design:** Cross-sectional

**Methods:** The sample was composed by 393 treatment-seeking obese patients (79.1% women; mean age 43.0 years, mean BMI: 47.8 kg/m<sup>2</sup>), who were recruited from a university-based bariatric center. Trained clinicians assessed the participants through Structured Clinical Interview for DSM-IV Axis I Diagnosis (SCID-I/P).

**Results:** The rate of current frequency of any mental disorders was 57.8% (57.6% men vs. 58.5% women). Anxiety disorders were the most frequent diagnosis (46.3%) among those participants with current disorder. Age, educational level and global functioning were associated with the likelihood of presenting current mental disorders. The lifetime rate of any mental disorders was 80.9% (81.7 men vs. 80.7% women). Lifetime affective disorders were the most frequent diagnosis (Total 64.9%, bipolar disorders 35.6%, and depressive disorders 29.3%). Among those respondents presenting any lifetime mental disorders, about half of the sample presented 3 or more concurrent disorders.

**Conclusions:** Mental disorders are frequent conditions among obese patients before bariatric surgery. High rates of mental disorders suggest both disorders might exert mutual causal relationships or share common etiological factors. Prognostic implications of mental disorders on surgery outcome should be demonstrated in follow-up study.

## WPA-0350 IMPACT OF THE ECONOMIC CRISIS (2007–2011) ON SELF-PERCEIVED HEALTH IN THE SPANISH POPULATION

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**Background and aims.** The economic recession that began in mid-2007 in Spain is generating a strong economic impact on the population. Previous research indicated that economic difficulties impact on perceived health; however, the results are heterogeneous and inconclusive. This study analyzes the changes in health status after the outbreak of the economic crisis.

**Methods.** From data of the National Health Surveys of 2006 and 2011, we analyzed the evolution of two indicators of mental health and one overall perceived health indicator between the period before the recession (2006) and the period that marked the onset of the economic downturn in Spain (2011). These differences were analyzed by comparing the crude and adjusted Odds ratio of mental and general health indicators, through logistic regression models that included besides the variable 'study period', the sociodemographics factors that could potentially influence experienced health changes.

**Results.** The consumption of sleeping pills and anti-anxiety medications has dramatically increased (OR adjusted = 1.6, 95% CI 1.4-1.8). The proportion of cases of mental dysfunction (score <sup>3</sup> 3 on the GHQ-mind) has increased among males (OR adjusted = 1.2, 95% CI 1.1-1.3), but has declined slightly among women (OR adjusted = 0.92, 95% CI 0.87-0.99). However, the perception of optimal overall health has evolved favourably during the economic downturn.

**Conclusions.** The economic downturn has caused a differential impact on health indicators. The quality of life associated with mental health has only worsened in the male population, while perception of general health follows its secular trend of improvement

## **WPA-0434 : LENGTH OF HOSPITALIZATION OF PSYCHIATRIC PATIENTS AND ITS ASSOCIATED FACTORS IN AL-AMAL MEDICAL COMPLEX**

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**Aims:** It is to identify the socio demographic factors & the clinical diagnosis which are associated with the length of stay of these patients

**Methods:** The research employed a descriptive retrospective study structured data form approach. The study population was all Psychiatric patients who were admitted at Al-Amal hospital for treatment and get discharged since it's inception. The sample of this study was all psychiatric patients who were admitted and discharged in the year 2008/2009. (328 patients). A *pretested structured data form* will be used to extract the data from the medical records at Al-Amal hospital. The socio demographic variables (age, gender, educational status, occupational status, marital status) and the clinical variables (type of diagnosis, date of admission, date of discharge, number of days stayed as in patient). The outcome variable is Length of hospitalization as an inpatient. Descriptive statistics were used to describe the study variables and the outcome variable.

**Results and conclusion:** Among the diagnosis, schizophrenia is the most frequent diagnosis leading to admission in the psychiatric ward and was predominantly of male gender. Most of the patients who stayed longer duration of hospital stay were males, single, young, with low educational level and never attend to job. The patients with these identified factors may have important implications on the care and prognosis of psychiatric disorders in the community.

## **WPA-0484 ADDICTIONS TO ALCOHOL AND OTHER SUBSTANCES PSYCHOACTIVE IN RURAL SOUTH OF BENIN**

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**Background and aims:** The substances psychoactives as the alcohol, tobacco and the cannabis constitute a major problem of public health.

**Objective:** To study the addictive behavior to psychoactive substances in rural Benin.

**Methods:** It was a descriptive and analytical cross-sectional study. It was held from August 17 to 24, 2013 in Ouidah-Kpomass\*-Tori-Bossito health area. It was conducted using a cluster sampling technique and involved 1,530 subjects. Data were collected using the MINI (Mini International Neuropsychiatric Interview) 5.0.0 tool and a structured guide with specific data on mental health. Data were captured and analyzed using Epi-data and Epi-info softwares. Frequencies were compared by using the Chi<sup>2</sup> test and a p-value <0.05 was considered significant.

### **Results**

The prevalence of alcohol dependence was 6.3% versus 5.2% for alcohol abuse. The prevalence of addiction to other substances was 2.3% versus 0.8% for the abuse of the same substances.

The prevalence of alcohol dependence was significantly higher among less educated subjects ( $p < 0.003$ ) and among farmers ( $p < 10^{-4}$ ). The prevalence of alcohol abuse increased significantly with age ( $p < 10^{-4}$ ), in male subjects ( $p < 10^{-4}$ ) and in animists ( $p < 10^{-4}$ ).

The addiction to psychoactive substances was associated with mood disorders, anxiety, suicidal risk and schizophrenia.

### **Conclusion**

The prevalence of addiction to psychoactive substances is not negligible in the OKT area. There are certain comorbidities.

## WPA-0323 USE OF MENTAL HEALTH SERVICE AMONG KOREAN ALCOHOL USE DISORDER ADULTS

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**Background and aims:** Despite the high prevalence of alcohol use disorders in Korea, the rate and associated factors of alcohol use disorders on mental health service utilization were not fully investigated.

**Methods:** The data was extracted from the Korean Epidemiologic Catchment Area (KECA) study in 2011 (N=6,022).

**Results:** The rate of mental health service utilization was only 8.6%, in subjects with alcohol use disorders, significantly lower than in subjects with other psychiatric disorders. The factors associated with service utilization were examined including comorbidity, psychotic symptoms, types of alcohol use disorders, and legal problems from alcohol use. Among the various factors examined, service utilization was only associated with the presence of comorbid psychiatric disorders.

**Conclusions:** Further survey on the reasons for not utilizing services revealed that lack of insight was the most common reason. Although alcohol use disorders are prevalent in Korea, patients with alcohol use disorders seldom utilize mental health services unless suffering from comorbid psychiatric disorders. Most subjects with alcohol use disorders had no insight toward their alcoholic problems. These results imply that reinforcement in public mental health advocacy, especially for alcohol problems, is highly requested in Korea

## **WPA-0325 TWELVE-MONTH PREVALENCE OF PSYCHIATRIC DISORDERS IN IRAN: RESULTS FROM THE IRAN MENTAL HEALTH SURVEY, 2011**

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**Objectives:** The purpose of this study was to estimate the 12-month prevalence and severity of psychiatric disorders in the Iranian population.

**Methods:** The Iran Mental Health Survey (IranMHS) was conducted in 2011. A multistage, cluster sampling household design was employed and a total of 7886 residents aged 15-64 years were interviewed. To ascertain the 12-month DSM-IV diagnoses, a Persian translation of the Composite International Diagnostic Interview (CIDIv.2) was administered.

**Results:** The response rate was 86.2%. The 12-month prevalence of any psychiatric disorders was 23.6% (95% CI= 22.4-24.8) with 26.5% of women and 20.8% of men meeting the criteria for one or more psychiatric disorders. The most prevalent group of disorders was the group of anxiety disorders (15.6%), followed by mood disorders (14.6%). The 12-month prevalence of any substance or alcohol use disorder was 2.8%. Almost two-thirds (63.3%) of individuals with a mental disorder had moderate or severe illness.

**Conclusion:** The relatively high prevalence of psychiatric disorders and particularly the high prevalence of major depression merits further attention in Iran's mental health policy and program planning.

## **WPA-0395 PREVENTION AND PROMOTION OF MENTAL HEALTH: EXPERIENCE OF CARRYING OUT THE MENTAL HEALTH DAY IN SIBERIAN REGION OF RUSSIA**

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**Objective:** analysis of carrying out the Mental Health Day at Clinics of Mental Health Research Institute in Tomsk, Russia.

**Materials and methods:** documentation about carrying out the Mental Health Day; data about number of visitors of Institute's Clinics during Open Doors Days from 1993 to 2012 (social-demographic, global clinical and laboratory methods of examination, questionnaire of mental health care users in 2010-2012) - periods before economic crisis of 2008-2009 and thereafter.

**Results:** number of visitors in the second period has increased by 1,4 times. Number of female visitors has increased by 1,1 times. In both periods, persons of mature and elder age predominated. In three forth of cases, non-psychotic mental disorders were diagnosed; drug addictions and alcoholism have been identified in 15% of cases, endogenous mental disorders \* in 10%. However, in the second period of observations, counseling, urgent help has been rendered almost in two third of cases as compared with the first period that can characterize severity of mental state of visitors.

Thus, necessity of carrying out the Mental Health Day has been conditioned by the following: strive of psychiatrists to attract attention of broad public to questions of mental health and cause the interest to discussed problem, to development of relevant interrelations between medical institutions and social departments; similar activities give possibility to all wishing persons with mental health problems to receive free, qualified help; analysis of causes and nosology of mental disorders allow development of preventive programs for promotion of health of the population.



## **WPA-0455 ACNE AND QUALITY OF LIFE**

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In psychotherapeutic clinic, patients without acne marks report this experience with great emotional charge; this prompted us the interest in identifying what makes acne to be lived as a trauma.

Observation, reflection and bibliographical review (Rodríguez-Cerdeira, C. et al., 2011) led us to affirm that, in individuals with acne, it is expected to find: quality of dermatological life decrease; increasing levels of depression, anxiety and/or stress; strategies of coping; disturbance in the capacity for symbolizing and modulating affective experiences (characteristic of alexithymic individuals).

In study I we used a qualitative approach: 45 semi-structured interviews to patients with/or who had acne and to 30 health care professionals. Content analysis enabled the construction of the ICA - Inventory of beliefs and behaviors about Acne and its treatment.

In study II we applied a quantitative methodology to a pilot sample (N=367), with a protocol that includes a preliminary version of ICA, IQV-D, Brief Code, EADS 21 and TAS-20. This application justified the restructuring of the protocol of study III with university students (N=1666).

In study IV took part 95 dermatologists: they answered the questions on acne beliefs in ICA. These were compared with the data of studies II and III.

In study V a comparative analysis of the different studies will be made.

The analysis of the results of Study II points to the existence of a relationship between having acne, psychological condition and the individual behaviors.

Rodríguez-Cerdeira, C. et al. (2011). *Psychodermatology: Past, Present and Future*. The Open Dermatology Journal. 5, 21-27

## WPA-0483 PREVALENCE OF MOOD DISORDERS IN RURAL SOUTH OF BENIN

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<sup>1</sup>*lemacen, fss, cotonou, Benin*

<sup>2</sup>*santé mentale, cnhu, abomey-calavi, Benin*

**Background and aims:** The mood disorders are a major public health problem because of their prevalence and their impact on the individual's life and his environment.

**Objectives:** The objective of this study was to investigate the prevalence of mood disorders in rural Benin.

**Methods:** It was a descriptive and analytical cross-sectional study. It was held from August 17 to 24, 2013 in Ouidah-Kpomass\*-Tori-Bossito health area. It was conducted using a cluster sampling technique and involved 1,530 subjects. Data were collected using the MINI (Mini International Neuropsychiatric Interview) 5.0.0 tool and a structured guide with specific data on mental health. Data were captured and analyzed using Epi data and Epi-info softwares. The frequencies were compared using the Chi<sup>2</sup> test and a  $p < 0.05$  was considered significant.

**Results:** The prevalences of different mood disorders were 23.5% for major depressive episode (MDE), 3.1% for dysthymia, 3.1% for manic episode and 3.7% for bipolar disorder. The prevalence of MDE increased significantly with age ( $p < 0.03$ ) in women ( $p < 10^{-5}$ ), in widows and remarried ( $p < 10^{-4}$ ) and in subjects without employment ( $p = 0.002$ ).

**Conclusion:** Measures should be taken to reduce the mortality and morbidity associated with depression in this area.



Topic

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# Ethics, Law, Human Rights and Mental Health

abstracts - volume 2

## **THE CHALLENGE OF ANTICIPATORY DIRECTIVES IN PSYCHIATRY – AN ETHICAL ANALYSIS**

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Anticipatory directives help to promote patients' autonomy in the case of future mental incapacity and are currently increasingly discussed in the field of psychiatry. However, several ethical challenges impede their implementation in daily clinical practice and lead to scepticism among psychiatrists. Our contribution gives an overview on the state of the art of anticipatory directives in psychiatry and provides an ethical analysis of the major challenges in the context of mental health care.

In the first part of the presentation we focus on psychiatric advance directives. Starting from a concrete case of a patient with schizophrenia who refused an electroconvulsive therapy although it had helped in the past, we discuss ethically relevant ethical issues, namely: a) authority, b) scope, c) requirements for validity and d) implementation of advance directives. We also examine the role of psychiatric consumer organizations in the process of developing and drawing up psychiatric advance directives.

In the second part of the presentation we discuss joint crisis plans and advance care planning as special types of anticipatory directives, which emphasize the doctor-patient-relationship and the process of shared decision-making. Compared against advance directives, we point out advantages and potential risks with regard to patient autonomy.

In our conclusion we argue for further efforts to implement anticipatory directives in psychiatric practice. We take the view that such tools do not only help to promote the patients' autonomy but can also improve the medical treatment of patients with mental disorders by strengthening the doctor-patient-relationship.

## PHYSICIAN-ASSISTED SUICIDE AND THE ROLE OF THE PSYCHIATRISTS. A MEDICAL ETHICAL ANALYSIS

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**Objectives:** Physician-assisted suicide (PAS) is currently the subject of controversial discussion in many European countries, albeit only a few of them have legalized this end-of-life practice under certain conditions. For the main part, the people who ask for assistance in suicide suffer from incurable physical diseases. In rare cases, however, the suicide of patients who additionally or solely suffer from mental disorders is also assisted. The aim of this contribution is to describe potential roles of the psychiatrists in the context of PAS and to formulate ethical arguments for or against the respective involvement of psychiatrists in PAS.

**Method:** Philosophical analysis.

**Results:** Some authors argue that psychiatrists, invoking the social responsibility for suicide prevention, should strictly reject any involvement in PAS and offer a psychiatric treatment to patients with suicide plans. Others see the role of the psychiatrists in assessing the patients' competence, which constitutes a fundamental prerequisite for PAS from an ethical point of view. Moreover, others deem a medical prescription of a lethal drug and the assistance in suicide by psychiatrists for ethically acceptable under certain conditions.

**Conclusion:** We argue that psychiatrists are particularly well-suited to differentiate autonomous and non-autonomous suicide plans based on their expertise in the field of suicidology and in competence assessment. From an ethical point of view, the involvement of psychiatrists can thus contribute to quality assurance of a legalized practice of PAS, benefit the patient autonomy at the end of life and minimize risks of abuse.

## ETHICAL PROBLEM IN PSYCHIATRY PRACTICE OF DEVELOPING COUNTRY

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**Introduction:** Ethics are important in medicine and more so in psychiatry since psychiatry deals mainly with human conduct and behaviour. No area of medicine is so concerned with ethics as the field of psychiatry. Ethics are principles, not laws but standards of conduct, which define the essentials of honourable behaviour for the physician. In 18<sup>th</sup> century Thomas Percival wrote a code of ethics. Indian Psychiatric Society approved ethical guideline in 1989 Cuttack conference.

But in reality ethics in psychiatry is usually wrongly stated or assumed in India. This is because psychiatry remains a low priority in relation to other branches of medical science in our country. Apathy and ignorance of family members of mental patients, social stigma, unpredictable prognosis and variable treatment modalities are the probable reasons. In spite of low priority psychiatric disorders are amongst the important contributors of the “Global burden of Disease and Disability”.

**Hypothesis:** Treating psychiatric patients routinely in private clinic requires psychiatrists to confront basic ethical dilemmas. These are 1) Restricting individual freedom 2) Treating against will 3) Force for inpatient treatment.

Ethical issues depend on the following theories:

Utilitarian Theory – A fundamental obligation in making decision and is to try to produce the greatest possible happiness for the greatest benefit.

Parentalism - A person performing actions for another benefit without the person's consent. Physicians are supposed to treat patients as a caring parent would treat a young child.

Autonomy Theory – It is based on writing of Immanuel Kant. Relationship between a physician and an adult patient is conceived as relationship between two responsible persons.

**Observation:** Some common causes of malpractice (Law suits) in psychiatry seen in India are i) Negligence in diagnosis ii) Overlooking basic human rights iii) Consent not taken from patient iv) Risk of suicide v) Experimentation by doctor vi) Negligence in physical methods of treatment vii) Sexual relation with client and Exploitation.

**Conclusion:** Now a days following forces are to be considered as new ethical challenges a) Rapidly increasing cost of mental health care b) Influence of new technologies like MRI, CT SCAN Brain c) Societal reengineering for better mental health d) Increasing pressure by patient party e) Current market forces are demanding high quality health care.

**Discussion:** A practicing psychiatrist has to take more responsibility in management of mental disorders in spite of work load and criticism by few patients, guardians or vested interest people. One has to take it as normal inevitable professional hazards. Harassment by over enthusiastic patient party, pseudo – social activist, politicians or even by judicial officers are inevitable and one practicing psychiatrist needs careful consideration for such interference.

## **PODER JUDICIAL Y SALUD MENTAL PÚBLICA EN ARGENTINA: ¿SINERGIA O INJERENCIA?**

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### **Objetivos:**

Analizar la modalidad de interacción entre el poder judicial y las instituciones de salud mental pública en Argentina, en lo que respecta a los tratamientos compulsivos ambulatorios y a las internaciones psiquiátricas.

Los autores del presente trabajo desarrollamos nuestra práctica cotidiana en ambos ámbitos y el transcurso de los años nos ha permitido transitar las vicisitudes de esta modalidad de interacción, al compás del cambio de las sucesivas legislaciones. El más importante de dichos cambios se produjo en el mes de diciembre del año 2010, en ocasión en que se promulgó la ley nacional de salud mental 26.657, que derogó a la 22.914, vigente hasta esa fecha.

### **Método:**

- Análisis de ambas legislaciones.
- Estudio estadístico previo y posterior a la promulgación de la nueva ley, de: a) Cantidad de causas judiciales sobre internación (en las que se puede indicar tratamiento compulsivo ambulatorio o internación) b) Demanda espontánea de tratamientos e internaciones en hospitales generales.
- Análisis de la interacción judicial – hospital público en una muestra de casos.

### **Resultados:**

La ley 26.657 se propone el pleno goce de los derechos humanos de aquellas personas con padecimiento mental y el cierre de las instituciones psiquiátricas monovalentes. Da preeminencia a las decisiones sanitarias por sobre las judiciales, en directa oposición a la ley anterior.

A partir del cambio de ley se produjo una reducción de causas judiciales sobre internación y un incremento en la demanda espontánea de tratamientos e internaciones en hospitales generales.

Se detectó un desborde de los mismos por falta de recursos sanitarios.

### **Conclusiones:**

Las políticas sanitarias y judiciales actuales tienden a disminuir la judicialización de los casos, disminuyendo así la injerencia judicial en la salud mental pública e incrementando la sinergia. El cambio de una ley por otra con características tan opuestas, genera importantes dificultades en su implementación.

## **INVOLUNTARY TREATMENT IN EXPECTANT PATIENTS**

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### **Objectives**

The pharmaceutical treatment in expectant patients is a challenge for the medicine. Because of the limited number of studies on teratogenicity the factors, which determinate the selection of medicine and daily practice, are the clinical experience and the development over the years. We focus on the legal and pharmaceutical uncertainties which arise when we deal with expectant patients with psychotic symptoms and distortion of reality perception.

### **Method**

We analyze the medical and legal literature relevant to these common cases in the psychiatric practice.

### **Results**

Latest revisions confirm the possibility of maintaining a treatment with atypical antipsychotics. In case of a positive response of a specific previous treatment the research results support the use of the minimum effective dose (of atypical antipsychotics). The application of classic antipsychotics like haloperidol is considered as less appropriate.

### **Conclusions**

A comprehensive approach to expectant patients with psychotic symptoms is fundamental, seeking the minimal risk for both mother and fetus and evaluating at all times the risk versus benefit ratio.



## **ANALYSIS OF THE INVOLUNTARY HOSPITALIZATION IN A MENTAL HEALTH UNIT IN 2013**

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### **Objectives**

Deliver a detailed analysis of the mental distortions, which led to involuntary hospitalization in a Mental Health Unit in 2013 and their gender distribution.

### **Method**

We analyze the total number of hospitalizations in our mental health hospital unit. From the patient registry we extract the type of hospitalizations (voluntary or involuntary), the diagnosis and the gender.

### **Results**

In our analysis we find a total of 315 hospitalizations. 159 (50,48%) of them are voluntary, 150 (47,62%) are involuntary and 6 (1,90%) are a result of a judicial order. From the total involuntary hospitalizations; 81 patients were diagnosed as psychotics disorders (60%), 34 (25.18%) affective disorders, 11 (8.14%) personality disorders, 3 (2.22%) adaptative disorders, 2 (1.48%) mental retardation and 2 (1.48%) autism spectrum disorders.

### **Conclusions**

According to article 763 of Spanish Procedural Law (Ley 1/2000 de Enjuiciamiento Civil) from the 7<sup>th</sup> of January :” The hospitalization of a person due to mental disorders who is not in a condition to decide for himself/herself, even should he/she be a subject to parental authority or guardianship, shall require court authorization, which shall be obtained from the court of the place of residence of the person affected by such hospitalization.” For this reason the involuntary admission is considered as an exceptional and necessary measure, which is limited in time.

## **ASSESSING MENTAL CAPACITY: HOW MUCH AND WHAT KIND OF STANDARDIZATION IS APPROPRIATE?**

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In view of the ethical implications entailed in mental capacity judgments, a valid and reliable evaluation process is essential. For this reason, structured interviews have been developed to support an objective and reliable assessment. Despite the laudable intent of such instruments, it seems just as important to consider the downside of standardized procedures, particularly when complex issues such as mental capacity are at stake. Therefore, the aim of the presentation is to point out the drawbacks of standardizing capacity evaluations. By doing so, two particular aspects shall be highlighted that seem to require less or different sorts of standardization: a) mental capacity is about patients' decision-making which is highly idiosyncratic, dependent on individuals' decision-making styles and preferences; b) mental capacity is not a purely objective commodity but strongly underpinned with normative reflections which make a check-box-approach inappropriate as well. On these grounds, an alternative approach is proposed which does not primarily try to standardize the assessment of relevant mental abilities but the physicians' process of coming to a judgment.

## **TWO-YEAR OUTCOMES OF COMPULSORY TREATMENT ORDERS (CTOs) IN A SCOTTISH HEALTH REGION (FIFE)**

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**Objectives:** To examine at two-year follow-up the mental health and legal outcomes of CTOs granted by the Mental Health Tribunal for Scotland<sup>1</sup> under the Mental Health (Care & Treatment)(Scotland) Act 2003<sup>2</sup>, comparing the under-65 and over-65 year old detainees.

**Methods:** A retrospective study of all CTO applications granted by the MHTS in Fife (population ~360K with 16.8% over 65 years old) during 2008 with outcomes, both legal and mental health at 2-year follow-up. All CTO applications, associated medical reports and the full findings for mental health disposal were scrutinized in addition to the patients' psychiatric case-notes and any subsequent mental health legal decisions. Patients were anonymised and data subject to statistical analyses.

**Results:** 85 CTO applications were examined, 62% were male, and 40% were aged 65 years or older. The majority (95%) of CTOs were preceded by a short term (28 days) detention certificate. 64% had previous admissions to psychiatric inpatient care. The older cohort had significantly higher recordings of organic diagnoses and confusion, and rates of death at follow-up (38% v 4%), with the younger cohort having higher rates of previous detention (71% v 18%), substance misuse, and hospital discharge at follow-up (86% v 53%).

**Conclusions:** Many patients require compulsory periods of care and treatment for mental disorder. Although the younger cohort has higher rates of functional psychotic illnesses, often in combination with substance misuse, the older population have higher rates of detention with poorer outcomes (death). The demographic shift to an aged population will further impact on this potential challenge for service delivery.

### **References:**

1. <http://www.mhtscotland.gov.uk/mhts/Home/>
2. <http://www.scotland.gov.uk/Topics/Health/Services/Mental-Health>

## **NON-GRANTING OF COMPULSORY TREATMENT ORDERS (CTOs) BY THE MENTAL HEALTH TRIBUNAL FOR SCOTLAND (MHTS)**

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**Objectives:** To examine refusals by the MHTS<sup>1</sup> of CTO applications under the Mental Health (Care & Treatment)(Scotland) Act 2003<sup>2</sup> and identify potential targets for submission improvements.

**Methods:** A retrospective study of all CTO applications in Scotland refused by the MHTS during the 2-year period ending April 2012. All refused CTO applications, associated medical reports, interim orders, the full findings and reasons for non-grant of the Order, and any CTO granted for that patient in the following 6-months, were examined.

**Results:** 4.6% (99) of all CTO applications over this period were refused by the MHTS. Of these, 53% were male; the mean age was 45 years (15-92 years) and 19% were aged 65 years or older. Of the refused applications 49% had psychotic illnesses, followed by mood disorders (27%) and organic brain disorders, mainly dementias (11%). The main reasons for non-granting of the CTO were failure to meet the required legal criteria of significant impairment of decision making in regard to treatment for mental disorder (50%), lack of significant risk to self or others (29%), and lack of necessity (13%). In 20% of refusals there were incomplete data on detention criteria being met, but the majority were due to errors in the application processes as stipulated in the legislation.

**Conclusions:** Refusals of CTO applications are small in number but significant. Records demonstrate a thorough examination of criteria for detention by the MHTS. The proportion that is refused due to errors in application processes could be improved through training and potentially have significant cost savings both financially and emotionally.

### **References:**

1. <http://www.mhtscotland.gov.uk/mhts/Home/>
2. <http://www.scotland.gov.uk/Topics/Health/Services/Mental-Health>

## PSYCHIATRISTS AND SOCIAL MEDIA: ETHICAL CONSIDERATIONS AND THERAPEUTIC BOUNDARIES

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**Objectives:** The use of social network such as Facebook has had high penetration rates in general population. The role of social media in the medical sectors is far reaching, and many questions in terms of ethics and professionalism remain unanswered.

Online interactions with psychiatric patients raise important challenges. In this study our aim was to evaluate trends in social network use among psychiatric health care professionals in Mexico.

**Methods:** We devised a 23 item questionnaire. Items evaluated nature and frequency of social network used, psychiatrist's attitude toward online patient interaction. Instances of stalking behaviour by patients were also recorded, and their characteristics were analysed.

**Results:** 27 subjects responded to the survey, out of which 16 (60%) were female. Average age was 31 years. 96% of all subjects were users of at least one social media. Facebook was the most popular. 88% of those who used a social media website did so daily, and of these 12% had a public security setting, making information widely available. 88% had received a friend request from a patient, but only 12% felt such interactions were ethically or professionally acceptable. One third of all respondents had suffered from online stalking from a patient, most commonly from patients with personality disorders.

**Conclusions:** Use of social networking among psychiatrists in our setting is nearly universal. Online interactions between therapists and patients were quite common, as were instances of stalking behavior. These findings are in sharp contrast with health care professional's attitudes towards these interactions, which are mainly negative. Care must be taken by therapists in order to ensure online professionalism.

**References:** Bosslet GT, Torque AM, Hickman SE, Terry CL, Helft PR. The patient-doctor relationship and online social networks: results of a national survey. *J Gen Intern Med.* 2011Oct;26(10):1168-74.

Stump T, Zilch S, Coustasse A. The emergence and potential impact of medicine 2.0 in the healthcare industry. *Hosp Top.* 2012Apr-Jun;90(2):33-8

## **ANÁLISIS DE LOS INGRESOS INVOLUNTARIOS CURSADOS EN EL HOSPITAL NUESTRA SEÑORA DEL PRADO DURANTE EL AÑO 2013**

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### **OBJETIVOS:**

Estudio descriptivo sobre los ingresos involuntarios cursados en la Unidad de Hospitalización Breve del Hospital Nuestra Señora del Prado durante el año 2013.

### **MÉTODOS:**

Estudio descriptivo transversal retrospectivo realizado a través de la base de datos informatizada del servicio de Psiquiatría del Hospital Nuestra Señora del Prado. Los datos utilizados son: número de ingresos involuntarios, voluntarios que pasan a involuntarios e involuntarios que pasan a voluntarios en la Unidad de Hospitalización Breve.

### **RESULTADOS:**

Durante el año 2013 en el Hospital Nuestra Señora del Prado hay un total de 94 ingresos involuntarios en el servicio de Psiquiatría; de los cuales 29 son ingresos voluntarios que pasan a involuntarios. En enero se registran 4 ingresos involuntarios, en febrero 9, en marzo 17, en abril 10, en mayo 2, en junio 12, en julio 1, en agosto 4, en septiembre 6, en octubre 12, en noviembre 13 y en diciembre 4.

### **CONCLUSIÓN:**

Se registra una media de 7,8 ingresos involuntarios por mes. El mayor número de ingresos involuntarios se realiza en el mes de marzo (18%) y el menor número de éstos en julio (1%). Un 31% de los ingresos involuntarios en un principio eran voluntarios, pero a lo largo del ingreso en la Unidad de Hospitalización Breve se decide notificar al juzgado la necesidad de realizar un ingreso involuntario.

### **REFERENCIAS:**

Cabrera Forneiro, J., Fuertes Rocañín, J.C.: *“La enfermedad mental ante la Ley”*.

## **MENTAL HEALTH, JUSTICE AND HUMAN RIGHTS FOR THE ELDERLY; A LEVEL PLAYING FIELD?**

N Hills

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Mental health professionals have a particular responsibility to ensure that older people with mental health problems are involved to the maximum degree in decisions about their treatment and care, to safeguard their patients' rights and to combat ageism and elder abuse.<sup>1</sup>

Consistent with the above WPA Old Age Section statement, my research examined the legislation and protective procedures in Western Australia (WA), which apply to older people with impaired decision making capacity. Comparisons with the position in England suggest there are shortcomings in the legal procedures, and a lack of legally binding attention to human rights in WA. There is no Australian or WA Human Rights Act, comparable to the Human Rights Act 1998 (UK), no Mental Capacity Act, and no Deprivation of Liberty Safeguards (DOLS) as are included in the Mental Health Act 2007 (UK). There is no recourse to international courts equivalent to the European Court of Human Rights, which was so important in the Bournemouth case.<sup>2</sup> A Charter of Mental Health Care principles included in the Mental Health Bill 2013 (WA), requires services "to be respectful of human rights", without providing assured access to legal redress of breaches. Legal aid services in WA are of limited scope and availability, reducing the prospect of challenges.

Mental health and substitute decision making law and procedures in WA originated in England during the colonial era. In each country these have diverged, becoming complex and costly in England, while in WA they remain comparatively simple and inexpensive. The risks to fairness, natural justice and human rights however may be unacceptable.

### **References:**

<sup>1</sup>WPA Section of Old Age Psychiatry, website.

<sup>2</sup>HL v. THE UNITED KINGDOM - 45508/99 [2004] ECHR 720 (5 October 2004)

## **VOLUNTARY OR INVOLUNTARY PSYCHIATRIC ADMISSION. HAVE WE CHANGED CRITERIA?**

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### Objectives

The aim of this study was to determine if we have changed admission criteria in Borderline Personality Disorders (BPD) in recent years, according to Article 763, Spanish Civil Code.

### Methods :

Descriptive study of BPD admissions between 2008-2013. We made two groups to describe if professionals have changed the criteria (First group: 2008-2012 admissions and second group 2013 admissions). We study sociodemographic and clinical variables (main diagnosis in Axis 1 and 2 of CIE 10) and the fact of consenting or not voluntary admission.

Appelbaum and Roth's criteria have been used as assessment.

### Results:

The data obtained suggest that professionals haven't changed criteria for voluntary admissions on BPD, keeping on the same capacity's assessment tool. An increase of admission demand have been observed, either of increase diagnosis or difficult extrahospitalary treatment.

Also, sociodemographic variables have changed: poor working and social integration, lower toxic abuse and increased readmissions.

### Conclusions:

We have to encourage our patients to take their decision unless this is not reasonable or safe.

A conflict between doctor's duty to preserve life and the right of patients to make their own medical decisions is obvious. Law accepts that not incongruous decision is an incompetent decision.

### References:

-Borderline personality disorder: exceptions to the concept of responsible and competent. Little J, Little B. *Australas Psychiatry*. 2010 Oct;18(5):445-50.

-Clinical issues in the assessment of competency. Appelbaum PS, Roth LH. *Am J Psychiatry*. 1981 Nov;138(11):1462-7.

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## **ATTITUDES AND OPINIONS OF PEOPLE THAT SUFFER FROM BIPOLAR DISEASE ABOUT ORGAN AND TISSUE DONATION**

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**Objectives** Post-mortem studies employing donated tissues are of paramount for studying pathophysiology in neuroscience research. Knowing beliefs and opinions regarding tissue and organ donation of those affected by central nervous system diseases is necessary to conduct an effective and ethical informed consent process. Therefore, the objective of our study is to present preliminary results on thoughts and ideas of people that suffer from bipolar disorder, an illness for which post-mortem tissue is needed and donations are scarce, are on the topic of organ and tissue donation for research.

**Methods** The study was conducted in tertiary facility specialized in treatment of bipolar disorder in a University. Using qualitative based in depth interviews, 15 patients were approached and were able to express their thoughts, impressions and what they did know about organ and tissue donation for research.

**Results** Participants didn't know about the possibility of organ and tissue donation for research. Their first impression on the topic was shock, astonishment and daze. After some questions and clarifications, participants expressed the thought that organ and tissue donation for research was something good. They also expressed that "science studies could save lives as much as organ donation for transplant". Finally, the participants said they "wish to know more about those kind of science practices".

**Conclusions** Although people with bipolar disorder are usually not aware of the possibility of donating tissue for the purpose of research, they expressed interest and the desire to be donors once they had sufficient knowledge on that matter.

## **AN AUDIT ON USE OF C.T.O. IN THE LONDON BOROUGH OF TOWER HAMLETS**

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### **Objectives**

On the background of current discussion about the effectiveness of a Community Treatment Order (CTO) we conducted a descriptive study on sociodemographic and clinical features of patients under Section 17A of the mental Health Act 1983 (amended 2007) with a view to understanding if this is effective to reduce readmission rates.

### **Methods**

We collected data for patients who had been under CTO within to a single Mental Health Trust in east London. Electronic records system (RIO) was used for data collection. We examined all the patients ever under CTO in the period from 23.07.2008 till 11.09.2013 and collected information on age, gender, ethnicity, diagnosis, and duration of illness.

### **Results**

236 patients were identified, in a catchment area of 263000 residents.

They had average age 41.1 with SD 11.413. 30.2 % were female and 69.8% were male.

The ethnically diverse local population was reflected in our sample: 35% white British, Irish or any other white background. 26% Bangladeshi. 27.2% African, Caribbean or any other black background. 3.8% Indian. 1.7% Chinese. 2.5% any other background.

Diagnostic categories were grouped: Schizophrenia, Schizophrenia and comorbid substance misuse. Schizoaffective disorder. Personality disorder. Affective disorder.

Average duration of illness and age of onset is described.

Duration of CTO: average 321.5 days, (SD=273.7, range 6-1459). Outcome (partial): 10.1 % discharged at tribunal. 18.3% discharged by Responsible Clinician. 1.1% renewed. 22.7% lapsed. 35.9% Revoked. 1 patient deceased.

### **Conclusions**

In total 35.9% (1 in 3) CTO required readmission. A previous study in the same area of London suggested that 11 in a population of 145.000 could benefit from a CTO. A broader and less personalised use of CTO might explain unclear evidence of effectiveness in this measure in a national review.

## **RETROSPECTIVE AND CRITICAL ANALYSIS OF PATIENTS VICTIMS OF VIOLATION OF THE HUMAN RIGHTS BY THE DIAGNOSIS OF HOMOSEXUALITY ACCORDING TO THE CLASSIFICATION DSM-III: CONSEQUENCES OF THE PAST IN THE PRESENT**

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### **OBJECTIVES**

Determine whether the diagnosis of homosexuality made by the DSM – III classification has induced human rights transgression to homosexual patients, even though it is not considered an actual nosological entity.

### **METHODS**

Review of clinical histories of psychiatric patients who attended an ambulatory psychiatric medical center, whose backgrounds and homosexuality condition caused violation of their Human Rights.

### **RESULTS**

The analyzed cases prove that the diagnosis of homosexuality supported by older psychiatric classifications (DSM III) ventures the chance of increased risk and violation of the Human Rights in the actual XXI century.

### **CONCLUSIONS**

Nowadays, even though the homosexuality is not a pathological diagnosis according to the actual psychiatric classifications, the use of older classifications still develop possible risk factors in patients with various sociodemographic contexts. Probably, our classifications and the reality of our patients are still far from being of universal.

## **EVALUATION OF ATTITUDE TOWARD THE MENTAL ILLNESS AND HUMAN RIGHTS SENSITIVITY AMONG DIRECTORS OF MENTAL HEALTH FACILITIES**

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**Objectives :** This study aims to investigate the attitudes and sensitivity of directors of mental health facilities, who participated in the Human Rights Education Program, towards mental illness and their human rights. The findings will be used to figure out current situation of the mental health field in perspective of human rights issue as well as a basis for future program development.

**Methods :** We investigated the questionnaires from the Human Rights Education Program by applying two questionnaires for assessment of their attitudes and sensitivity toward human rights of mentally ill people. One questionnaire is the Assessment Tool for Human Rights Education which was developed to investigate the human rights sensitivity and contains questions specifying mental health issue. The other is Community Attitudes Toward the Mentally Ill (CAMI) which was developed by S. Martin Taylor and Michael J. Dear.

**Results :** There were no significant differences in CAMI and human rights sensitivity according to participants' sex and education level. Female showed significant positive attitude at social restrictiveness and community mental health ideology of CAMI. Participants over 60 years old showed more negative attitude than younger participants at CAMI questionnaire. In human rights sensitivity questionnaire, participants aged 40-49 years were less sensitive than those aged 20-39. Doctors and non-medical persons were found to be more negative at both CAMI and human rights sensitivity. Directors of community psychiatric rehabilitation centers had more positive attitude and better sensitivity than others. About questions for benevolence in CAMI and human rights sensitivity, there was no significant difference according to their duration of working. About questions for authoritarianism, social restrictiveness, and community mental health ideology in CAMI, participants who had worked less than 5 years and more than 30 years showed more negative attitudes than others.

**Conclusions :** The findings of the investigation are diverse depending on the characteristic variables of the participants about their attitudes toward mental illness and human rights sensitivity. We could propose that development of more individualized and user-friendly approach according to characteristics of participants should be necessary to make the education program be more practical and effective.

## **ETHICS INSIDE ME, WITH ME AND AROUND ME. CONFIDENTIALITY INSIDE ME AND WITH ME**

D.Bošković Đukić

Belgrade, Serbia

Institute for mental health

Ethical codex regulates numerous situations that concern the behavior of both the therapist and the supervisor, the way a treatment is taking place while one of the rules is confidentiality. Confidentiality is defined as an ethical responsibility and obligation on the part of the therapist not to divulge to other persons information obtained in the interaction with the client. I work in a psychiatric institution where the primary ethical model is protection and confidentiality of the client's communication and everything that is related to the client.

The principle of confidentiality in supervision relates to information concerning professional work of the supervisor, the supervisor's personality, privacy as well as that of the client. This is the responsibility of the supervisor and a source of safety and protection, although it occasionally puts at risk the rights and interest of the supervisee. Confidentiality allows the supervisee to reveal safely and without anxiousness his/her delicate and difficult experiences, dilemmas and feelings and to expose his/her work to a critical observation with a possibility of changes. Accord and agreement of supervision establish and promote confidentiality in the supervisory's relationship (level of self-revelation, assuming responsibility for one's own actions).

I think that it is necessary that we have at all times on our mind that confidentiality cannot be completely absolute. There are some situations when the therapist and the supervisor *may* and sometimes when they *must* reveal some information. This indicates that there are limitations to confidentiality.

## **ETHICS IN COGNITIVE BEHAVIORAL THERAPY AND SUPERVISION**

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<sup>b</sup>Department of Psychiatrics, Faculty of Medicine and Dentistry, Palacky University Olomouc, University Hospital Olomouc

**Objective:** The task of supervision is obvious – to increase the value of the therapeutic process in the client's best interest. There are many ethical questions rising in supervisors thinking about patients and also about therapist during CBT supervision.

**Aims:** The first aim was review the literature about ethics of CBT supervision and to compare the attitudes and belief about ethical questions in trainees of CBT and CBT supervision. The second aim was to find if there were any relations between ethical self-reflection and therapeutic skills of CBT trainee.

**Methods:** The first method was narrative review. A literature review was performed using the National Library of Medicine PubMed database, Scopus and Web of Science, additional references was found through bibliography reviews of relevant articles up to September 2013. Databases were searched for articles containing the following keywords: cognitive behavioral therapy, therapeutic relationship, training, supervision, ethics, self-reflection. The review also includes information from monographs referred to by other reviews. The second step was using the self-reflect questionnaire about ethical questions and assessment of the therapeutic skills of CBT trainees by their CBT trainers.

**Results:** Strengthening ethical self-reflections in supervisees is a valuable way of improving the development of ethical aspects of professional growth throughout all stages of their career. Training and supervision focused on self-reflection on ethical aspects are beneficial to both supervisees and their patients. Preliminary results shows, that therapist with high level of ethical self-reflection are significantly better in therapeutic skills assessed by trainees.

## **INTERNATIONAL PEACE PROCESS REVISITED: WEST AND THE WORLD**

Vijoy K. Varma

Fort Wayne, IN 46845, USA

In my earlier presentations, I discussed international discord and warfare from the perspective of the third world. The breakdown of the Soviet hegemony in 1991 gave a hope for World peace which proved to be false and elusive. That left the U.S. as the only superpower with responsibilities the U.S. has been incompetent and unable to fulfil.

The history of warfare is largely the history of technology, comparing firepower. The history is replete with examples of a primitive force pitted against a far superior firepower, with catastrophic consequences (Zulu, 1838, Tashkent 1865, Sokoto 1897, Omdurman 1898). Bravery is extolled; however, the victorious are not necessarily brave, only better equipped. There is no bravery going against a technologically inferior adversary. Bravery consists of defending against odds. There was bravery in Poland, the USSR, and the U.K. warding off the Nazi onslaught. There is little bravery in the U.S. action in Afghanistan or Iraq. Almost by definition, no act of aggression can ever be called 'brave'!

The last decade-and-half has witnessed large-scale violence in the world. The world has stood by, largely impotent, as large-scale genocide occurred, in Cambodia, in Serbia, in Rwanda, now, in the Sudan.

The United States has increasingly taken upon itself the task of teaching the world lessons in government, little realizing that it is an impossible goal. The history of the U.S. inspires little confidence in its role as the world's policeman. In the process, it has unleashed great destruction and chaos. It has demanded support and loyalty from other countries, particularly western countries, castigating those who do not follow suit.

The history of warfare illustrates the futility, or at least, limitations of warfare. Jesus Christ said, "For they that live by the sword shall die by the sword." As the great Mahatma said: "There is no way to Peace, Peace is the way!"

## **PSYCHOTIC PARRICIDE: CAN WE PREVENT IT? A STUDY OF 15 CASES**

R.Chebbi, W.Krir, I.Berrahal, S.Eddhif, N.Lakhal, A.Oumaya, S.Gallali  
University of Medicine of Tunis, Tunis, Tunisia.

### **Introduction:**

“You wanted to kill the father to be the father yourself. Now, you are the father, but the father is dead...” (Freud, 1928, p.216). The term parricide is originated from Latin word parricida: parri means parent and cida means who kills. Parricide is a term that suggests at the same time the criminal and his act represented by the killing of the father or the mother or any other legitimate ascendant. Although not very frequent, it has existed for a very long time. In the literature, we can find many descriptions about famous parricides through history. It represents from 2 % to 3% of homicides in France and 20% to 30% of psychotic crimes, in Canada it represents 4% of all the homicides, 1,6 % in the USA, 3,4% in Australia and 2.8% in England. So it is a rare event, in which the frequency appears to be relatively stable since the 19th century. It is a type of homicide with a major impact both on the family and on society, hence the importance of understanding it better.

### **Objectives:**

Describe the profile of schizophrenic parricide and identify risk factors that lead to violence.

### **Methods:**

This research primarily of descriptive and concrete nature includes 15 automatically hospitalized schizophrenic parricides, between February 2002 and November 2012, in the forensic psychiatric department of Razi psychiatric hospital of Tunis after the cases were dismissed "because of dementia ".(Article 38 of the Criminal Code). The study material included observations and medical records, criminal psychiatric assessments, potential medico legal autopsy reports and end of judicial instruction reports. For each case, we have transcribed in an annexed sheet the information collected from the files. Data were coded and entered using the "SPSS" software in its Version20.

**The results are being.**



## **REDUCTION OF MECHANICAL RESTRAINT IN A PSYCHIATRIC WARD: A COHORT STUDY**

Juan A García-Sánchez<sup>1</sup>, José Guzmán-Parra<sup>1</sup>, Isabel Pino-Benítez<sup>1</sup>, Mercedes Alba-Vallejo<sup>1</sup>, Fermín Mayoral-Cleries<sup>1</sup>.

1. University Regional Hospital of Malaga Spain. Biomedicine Institute of Malaga (IBIMA).

### **Introduction.**

Mechanical restraint is still present in psychiatric inpatient facilities. During the last 15 years, clinicians, hospital administrators and health authorities have raised concern about the dangers of restraint and developed recommendations and strategies to reduce its use in clinical practice. Although it is well-known that there exist effective methods for reducing coercion in the mental health area, there is still limited information on what type of measures are most efficient. The aim of the study was to determine whether the introduction of measures at local level had contributed to reducing the use of mechanical restraint in the Mental Health Hospitalization Unit in the University Regional Hospital of Malaga (Spain).

### **Method.**

The use of mechanical restraint was analyzed by comparing two time periods: 2012 and 2013. The principal interventions were 1) meetings with staff in which the authorities proposed as a priority the reduction of mechanical restraint, 2) promotion of alternative interventions, prior to mechanical restraint, such as rapid response from staff, seclusion and de-escalation and 3) analysis of previous data to find weak points for improvement.

### **Results.**

Mechanical restraint was reduced from 164 episodes in 2012 to 85 episodes in 2013. The percentage of restrained patients was reduced by 28.4% (from 81 to 58). There were no significant differences regarding socio-demographic and clinical characteristics of patients restrained in 2012 and 2013. In 2013 the restraints episodes were largely related to agitation (35.3% vs 14%) and less to violence or aggressive behavior (47.1% vs 67.1%). There was a significant trend toward restraining fewer immigrant patients in 2013 (from 25.6% to 15.1%) ( $p=0.063$ ).

### **Conclusions.**

The introduction of the measures proved effective in reducing mechanical restraint during hospitalization. Specific plans are required, including varied interventions, in order to achieve marked reduction of this coercive measure.

## **PSYCHOTIC PARRICIDE: CAN WE PREVENT IT? A STUDY OF 15 CASES**

R.Chebbi, W.Krir, I.Berrahal, S.Eddhif, N.Lakhal, A.Oumaya, S.Gallali  
Militaire Hospital of Tunis, Tunis, Tunisia.

### **Introduction:**

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### **Methods:**

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**The results are being.**

## COMPULSORY ADMISSIONS AND MENTAL HEALTH LEGISLATION IN SOUTHWEST GREECE

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<sup>2</sup>. General Hospital of Athens "Gennimatas", National and Kapodistrian University of Athens, Athens, Greece

**Objectives:** Compulsory admissions represent a significant proportion of psychiatric hospitalizations. A wide variation seems to exist internationally regarding legal frameworks, administrative procedures, detention rates and clinical practice. The aim of the present study is to describe epidemiologic features and legal aspects of compulsory admissions in a large administrative area in Southwest Greece, in order to identify targets for future research and possible remediation.

**Methods:** Involuntary admissions in the Department of Psychiatry of the University Hospital of Patras were retrospectively assessed, during a 12-month period, for demographic features and data regarding legal procedures. Diagnoses following compulsory first assessment and at discharge were recorded for patients who were admitted in our department.

**Results:** During the period of observation, 218 compulsory assessments were made, corresponding to 190 patients and resulting in 183 compulsory admissions. Involuntary hospitalizations represented 44.9% of all psychiatric admissions in our department. Diagnosis at first assessment was most frequently psychosis (68.4%). Diagnoses at discharge were most often schizophrenia (52.8%) and bipolar disorder (21.3%). A history of multiple hospitalizations (>5) was observed in 17 (15.8%) patients, whereas 46 patients (42.6%) were hospitalized for the first time, and 13 (11.7%) exhibited their first psychotic episode. Of the 108 patients who were admitted in our department, only 13 (12.0%) actually attended the court hearing.

**Conclusions:** Current situation regarding legal procedures, health statistics recording and mental health care in Greece has still a long way to run. Clinicians and researchers should be encouraged towards further efforts to improve mental health care parameters.

## **ADVANCE DECISIONS TO REFUSE TREATMENT UNDER THE MENTAL CAPACITY ACT 2005 (ENGLAND & WALES): DO THE PROVISIONS SERVE TO STRENGTHEN PATIENT AUTONOMY OR ENABLE ITS VULNERABILITY IN LAW TO BE MAINTAINED**

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<sup>1</sup>. Langdon Hospital, Dawlish, Devon, United Kingdom,

<sup>2</sup>. Northumbria University, Newcastle upon Tyne, United Kingdom.

### **Objectives**

In England and Wales, under the provisions of the Mental Capacity Act (MCA) 2005 the competent adult's right to refuse future treatment has been placed onto a statutory footing in the form of Advance Decisions to Refuse Treatment (ADRTs). Two legal principles that are relevant to advance decisions involving refusals of life-sustaining treatment are (i) the sanctity of life and (ii) autonomy. These 2 principles may often come into conflict when competent adults make contemporaneous or advance refusals of life-sustaining medical treatment. Historically, the principle of sanctity of life has often prevailed in these circumstances, trumping the principle of personal autonomy. Our objective was to test whether or not patient autonomy has been strengthened by the statutory provisions of the MCA in relation to ADRTs.

### **Methods**

A literature search was conducted in various legal research websites for relevant legislation, case law, articles published in peer-reviewed journals and legal texts.

### **Results**

To be effective ADRTs must be *valid* and *applicable*. There are practical difficulties in proving the validity and applicability of advance decisions. Some of the difficulties have involved patients *anticipating* future treatment choices, the interpretation of 'specified treatment' and the lack of procedural requirements when creating ADRTs. Treatment for mental disorder administered under Mental Health Act 1983 can also trump an ADRT.

### **Conclusions**

Although the principle of autonomy was given primacy in some cases, even when this involved refusals of life-saving treatment, the literature suggests that there is significant scope when interpreting the validity and applicability of ADRTs under the MCA to allow the sanctity of life to prevail against a patient's stated wishes; this is especially the case when the likely consequences of the ADRT are contrary to the health professional's or the court's view of the best or most appropriate clinical outcome for the patient<sup>1</sup>.

ADRTs under the MCA may only provide symbolic support for individual patient autonomy.

<sup>1</sup> Alasdair R. Maclean, *Advance directives and the rocky waters of anticipatory decision-making*.

## **BEYOND THE MEDICAL MODEL: MHE BUCHAREST MANIFESTO**

V. Ibáñez Rojo<sup>1</sup>, P. Pini<sup>2</sup>, R. Grove<sup>3</sup>, and The Mental Health Europe Task Force on DSM5.

1. Mental Health Europe, Almería, Spain

2. Mental Health Europe, Florence, Italy

3. Mental Health Europe, London, United Kingdom

### **Objectives:**

Members of Mental Health Europe (MHE), a leading European NGO in mental health, representing professionals, families, users, and service providers, share a principled belief in human rights of patients, the right to give or withhold consent to treatment, to be informed about its effects and to know about alternatives. In furtherance of these principles MHE established a Task Force to investigate, debate and report on the development of DSM5.

### **Methods:**

Literature about DSM5 impact at service provision, insurance, expansion of medical diagnoses, psychopharmacological treatments and alternatives to biomedical diagnostic systems was reviewed.

### **Results:**

A manifesto with the results of the Task Force was approved in Bucharest in October 2013, at the conference "From stigma to inclusion" organized by Estuar. The manifesto calls on:

-WHO to ensure that the revision of ICD takes fully into account DSM5 critiques and involves people with lived experience of mental distress as equal partners in its construction.

-Medical insurance companies and service providers to abandon DSM5 as the only source of criteria for access to treatment.

-The American Psychiatric Association to respond to its critics and to abandon new diagnostic categories which have no scientific basis and pathologise normal aspects of human condition.

-Pharmaceutical companies and research groups to register all trials on open access databases and make their trial data freely available.

-EU, national and local governments to pass "sunshine" legislation which makes public all payments made by pharmaceutical companies to clinicians, other providers and consumer organisations.

-Research bodies to research into positive mental health and psychosocial approaches and to ensure people with lived experience participate as researchers as well as subjects.

### **Conclusions:**

There are alternatives to DSM and ICD diagnostic systems, but actions must be taken to establish initiatives with many groups within society who are looking beyond the biomedical paradigm.

## **WPA-0112 SOCIO-POLITICAL ASPECTS OF MENTAL HEALTH PRACTICE WITH ARABS IN THE ISRAELI CONTEXT**

A. Al-Krenawi<sup>1</sup>

<sup>1</sup>*social work, Ben Gurion University of The Negev, Beer-Sheva, Israel*

Since the 1948 establishment of the Israeli state, an event described by Arab peoples as *ÒAl-NakbahÓ* (catastrophe), the Arab minority in Israel has experienced oppression, trauma and social exclusion; they feel defeated, disempowered and poorer. There are huge gaps in quality of life between Arab and Jewish Israelis. Such social inequities, as well as other issues such as polygamy, have been identified as risk factors for psychological distress. This situation puts the Israeli Arab, like other post-colonial peoples, in an attitude of ambivalence towards modern mental health services. On the one hand, certain forms of intervention, particularly medicinal, may improve peoplesÕ lives. On the other, mental health services, as part of the colonial process, continue to present limited cultural sensitivity towards Arab peoples. A cultural gap leading to mistrust is a given when a non-Arab mental health provider comes into contact with an Arab client. Religious beliefs, the importance of the family and the stigma attached to mental health problems have substantial influence on the ArabÕs perception and reaction toward mental health problems and their treatment. The expression of conflict and negative feelings are not well accepted within Arab culture. For this reason, mental illness is often denied and kept away from professional help or expressed as a physical illness. There is also a difficulty for a male being treated by a female and for the individual to ask for help outside his family or community. Arab Muslims also generally have a tendency to resign themselves to GodÕs care and thus may neglect or deny symptoms.

Another tendency is the preference for using traditional healers and folk medicine. Other problems in mental health work are the passive attitude of the patient and the degree of authority vested in the therapist. To facilitate bridging this cultural gap, the therapistÕs first task is that of educating him/her self about the religious, cultural and national background of the client. Cultural competence and self-reflection are key components to effective cultural practice

## **WPA-0089 EVALUATION OF DO NOT ATTEMPT RESUSCITATION ORDER AT GENERAL HOSPITAL PSYCHIATRIC WARD IN JAPAN**

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<sup>1</sup>Department of Psychiatry, Gifu Prefectural Tajimi Hospital, Tajimi, Japan

### **Objectives**

Cardio Pulmonary Resuscitation (CPR) at Cardio Pulmonary arrest (CPA) has been problem oriented, often in the course of therapy involving medical complications at General Hospital psychiatric ward. Minooka<sup>1)</sup> has listed the problems in Japan as follows: 1) the patient wish is not respected, 2) the decision has been made often by the family, 3) Do Not Attempt Resuscitation (DNAR) order often lacks proper procedure, 4) DNAR order contents has not met consensus. We postulate that there has been no ample debate over the method of confirmation of patients` will in such psychiatric patient entrapped in possible CPA situation.

### **Methods**

We report our experience in implementing this postulation through case report.

### **Results**

We have thought that there is reasonable constant rationality, if therapeutic selection remains the same for the patient in the state of psychiatric unstableness after repeated explanation. And the patient wish should be respected, if minimum ability to give consent remains the same for the patient whom confirmed rationality holds consistency with conventional values.

### **Conclusions**

We conclude that there is no consensus regarding the method of confirmation of patients` will, but we should be able to give DNAR order, if minimum ability to give consent remains the same. DNAR order should be given according to psychiatric patient wish, and should not be given to reduce the family burden.

### **References:**

1) Masako Minooka: Sosei fuyo shiji no yukue (The ethic of DNAR). World Planning, Tokyo, 2012.

## **WPA-0290 NEUROETHICS: CONSCIOUSNESS VS. AWARENESS? SOCIO-LEGAL IMPLICATIONS**

M. Lage Cotelo<sup>1</sup>

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Throughout history, the formation of consciousness has been equated to the formation of personality of the individual based on his/her own convictions. Awareness involves making decisions under a given mental 'fitness'. Then what is the relationship between the acts coming from consciousness or awareness? Are we dealing with two different or complementary types of 'will'?

The starting point to solve the above issue is the dichotomy: determinism vs indeterminism and how this affects the visible part of the 'conscience vs awareness': social behaviour. Such social behaviour, a regulated behaviour, has searched, throughout history, a justification for those dissident manifestations which has been considered 'morally or legally' correct. The answers neuroethics provide deal, in this sense, with the explanations of 'unfinished sequences' regarding the normative ethical behaviour and, consequently, its positivization.

For these reasons, the analysis object factors will be:

- (i) - Behavioural legal theory vs legal consequentialism.
- (ii) - From normative ethics to legal neuroethics: consciousness vs awareness.
- (ii) - Moral basics for applied neuroethics: the 'social responsibility' and neuroethics.
  - Intentionality and awareness: the foundations of social neuroethics.
  - The ethics of the will: one apprehended neuroethics



**WPA-0314 ON VALUES OF ANALYSIS OF INDIVIDUAL CASES**

L. Vinogradova<sup>1</sup>

<sup>1</sup>*Independent Psychiatric Association of Russia, Russian Reseach Center for Human Rights, Moscow, Russia*

How should behave forensic psychiatric experts in cases of conflict between ethics and law, law and human rights?

Examples of several concrete forensic-psychiatric cases have been considered ethical, legal and human rights approaches, as well as influence of public opinion on position of experts. The differences of such approaches and hierarchy of human values aspects in making decision are analyzed. It is shown that Russian experts direct their attention exclusively towards legal aspect without taking into consideration ethical and human rights ones. In the situation of gap between law and law enforcement practice standpoint of experts, which should not be limited by the legal aspect, is especially important. Priority should not be dogma, but in general only ethics reflects personal individual approach.

References: Independent Psychiatric Journal, 2012,4, 70-74; 2013, 3, 57-68; 2008, 1, 95-97.

## **WPA-0396 ETHICS AND HUMAN RIGHTS IN CLINICAL PRACTICE AND BIOMEDICAL INVESTIGATIONS IN PSYCHIATRY: INFORMED CONSENT**

E.V. Gutkevich<sup>1</sup>, O.A. Pavlova<sup>2</sup>, V.D. Prokopieva<sup>3</sup>

<sup>1</sup>*Endogenous Disorders Department, Mental Health Research Institute SB RAMSci, Tomsk, Russia*

<sup>2</sup>*Clinics, Mental Health Research Institute SB RAMSci, Tomsk, Russia*

<sup>3</sup>*Neurobiology Laboratory, Mental Health Research Institute SB RAMSci, Tomsk, Russia*

Clinical practice of psychiatry in Russia is regulated by basic documents such as Federal Law "About bases of healthcare of citizens in Russian Federation" no. 323-FZ of 21.11.2011 and Federal Law "About introduction of changes into the Law of Russian Federation "About psychiatric help and guarantees of rights of citizens during its provision" no. 67-FZ of 06.04.2011. Obligatory receipt of informed voluntary consent on medical intervention for adults; legally responsible representatives \* parents or other substituting them persons of juvenile patients aged less than 15 years is established. Clinical research is described with the help of a protocol where planned aim and tasks; duration of the investigation, number of probands and selection criteria including inclusion and exclusion; methodology and methods of analysis of data and investigation; identification of final indices of efficacy and reporting on safety; accompanying therapy are indicated. Voluntary informed consent on medical intervention and information sheet and informed consent on clinical investigation meets principles of protection of rights of probands; rights of patients planned for inclusion into the investigation are not violated.

Local ethical committee at FSBI "Mental Health Research Institute" SB RAMSci works since 2003 managing ethical appropriateness between aims and results of clinical, psychological, biological (genetic, molecular-biological, immunological) and other investigations of mental disorders, interests and rights of the patient and his/her family members, interests and rights of the society as a whole.

## **DOCTORS AS GODS: SHOULD PSYCHIATRISTS MAKE PATIENTS DNR AGAINST THE PATIENT'S WILL?**

Mirabelle Mattar, Adekola Alao

SUNY upstate medical university, Syracuse, NY, USA

**Introduction:** Previous studies have shown that increased patient participation in the decision-making process was associated with increased patients' satisfaction. On the other hand, when physicians decide to act on the grounds of beneficence and not involve a patient in decision-making, the action is perceived as a threat to patient's autonomy. In this report, we will examine these issues in a 57 year old man with advanced liver cancer.

**Case Report:** The patient was admitted initially for shortness of breath and abdominal pain, pleural effusion and ascites. The patient has a history of alcohol dependency, end-stage hepatocellular carcinoma, cirrhosis of the liver due to hepatitis C and ethanol use. A psychiatric consult evaluation was then requested for the patient's capacity to "refuse DNR".

On psychiatric evaluation, patient was still insisting on wanting to be a full code if he needed to be resuscitated. He understood the meaning of DNR as well as the consequences of being fully resuscitated; he insisted that he wanted to be alive even if he is terribly sick. According to him, signing a DNR form contradicts his religious views and he wanted to be there for his 2 children.

A diagnosis of delirium was made. However, patient was evaluated when he was alert and oriented and was deemed to have the capacity to refuse DNR.

**Discussion:** This case illustrates the dilemma we often come across in consultation liaison psychiatry. Do we as physicians have the right to deny patient treatment that they want? How much should physicians play god? What is the role of economics in end of life decisions?

**Conclusion:** When it comes to issues of DNR or of end of life, emotions run high. Physicians and other treatment providers may make decisions based on their past experiences, cultural, religious as well as moral views.

## **WPA-0478 CONCORDANCE BETWEEN PREFERRED AND ACTUAL ROLES IN INVOLVEMENT IN DECISION MAKING AT PSYCHIATRIC OUTPATIENT CARE**

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<sup>2</sup>*Psychology, University of La Laguna, San Cristóbal de La Laguna, Spain*

<sup>3</sup>*Psychiatry, Fundación Jiménez Díaz, Madrid, Spain*

### **Objectives**

To assess the concordance between patients' preferred and actual roles during decision making in outpatient psychiatric care.

### **Methods**

Cross-sectional, consecutive sampling from an outpatient psychiatric clinic including six hundred and sixty-seven consecutive psychiatric outpatients attended at the Canary Islands Health Service was carried out. Patients completed the Control Preferences Scale (CPS) to evaluate the amount of control they want to assume in their process of making decisions about the treatment of their diseases.

### **Results**

A high response rate of 76% was achieved, resulting in a sample of 507 psychiatric outpatients. Sixty-three percent of psychiatric outpatients preferred a collaborative role in decision-making, 35% preferred a passive role and only a 2% an active one. A low concordance for preferred and actual participation in medical decision-making was registered with more than a half of patients wanted a more active role than they actually had. Age and the external dimension of doctors' health locus of control were found to be the best correlates of preferences for participation while age and gender were for perception of participation in clinical consultations. Psychiatric diagnoses registered significant differences in patients' preferences of participation in decision-making, while these differences were not apparent when reporting on their experience in their consultations.

### **Conclusions**

The findings emphasized that differences occurred in patients' preferences for information sharing and behavioral involvement and contributed to our understanding of patient's preferences for shared decision making and about implications for practice and future research.

## **WPA-0291 THERAPEUTIC JURISPRUDENCE AND NEUROETHICS: BASES FOR EFFECTIVE LEGAL SOCIAL INTEGRATION**

M. Lage Cotelo

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In modern legal systems, socio-legal exclusion phenomena tend to happen due to several factors. One of them and perhaps the most visible is that which derives from a behaviour which is contrary to individuals rights. A careful analysis of the effects involving the socio-legal exclusion of the subject (which has acted contrary to law) requires the transformation of the judicial process, adapt it to society, to think it according to the idea of therapeutic jurisprudence to validate the subject and make him/her share the process.

Moreover, there's been an attempt to explain the bases of behaviour, at least interdisciplinary way, that is, from a biological, psychiatric, ethically point of view, from the subject's own conscience ... But for 'Justice' in the broad sense of the term, these explanations have not provided results that can be considered as absolute, but Legal Science, in that it settles disputes over behaviours is (and should remain) inaccurate. Even then, locational scenarios that reconcile forensic psychiatry and legal sciences must be recognized.

Our proposal is to reconcile these two ideas: on the one hand adapt therapeutic jurisprudence to individuals. And on the other hand, have neuroethics as a pseudo-scientific field that endorses interdisciplinary thesis on the basis of individual's ethical behaviour.

## **WPA-0315 SEEING THE FUTURE IN A CRYSTAL BALL: ETHICAL ASPECTS OF UNDERGOING A PREDICTIVE GENETIC TEST FOR HUNTINGTON'S DISEASE**

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### **Background**

Huntington's disease (HD), which typically manifests in midlife, is a fatal genetic disorder involving the fields of neurology, psychiatry and ethics. It is often regarded as a model for genetic diseases as a predictive genetic test is available that can be used before any symptoms are present. The issues of a genetic test are especially pertinent in the case of HD since it leads to serious and long-lasting symptoms, and there is no cure. It is therefore important to highlight the ethical and social aspects of predictive genetic testing in order to gain a deeper understanding of the situation in which the families concerned find themselves.

### **Aim**

The aim of this study was to describe the experiences of undergoing a presymptomatic genetic test for HD using a case study approach.

### **Methods**

The study was based on 18 individual interviews with a young woman and her husband over a period of 15 months. The interviews were analyzed using a life history approach.

### **Results**

The results showed that the process of undergoing a presymptomatic test involves several closely connected ethical and medical questions, such as the reason for the test, the consequences of the test results and how health care services can be developed to support people in this situation.

### **Conclusion**

In order to provide accurate information and knowledge, support structures need to be developed and involve the whole family with an increased focus on the inevitable emotional strains that the testing and the first symptoms of the disease bring about.

## **WPA-0347 LOS JUICIOS: REPARACIÓN DE LA SUBJETIVIDAD. EL EFECTO SUBJETIVO CUANDO EL FALLO DEL MISMO NO ES FAVORABLE. CASO VERÓN.**

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Los juicios como reparación de la subjetividad ¿Cuál es el efecto subjetivo cuando el fallo del mismo no es favorable. Caso Verón.

El juicio del caso Verón (febrero / diciembre de 2012), dio un fallo inconcebible, que se absolvió impunemente a los 13 imputados en el secuestro (el 3 de abril de 2002), retención por la fuerza, sometimiento a la prostitución y desaparición de la joven tucumana María de los Angeles Verón.

La reparación en una víctima de trata excede la cuestión resarcitoria e impone la necesidad de pensar una reparación integral, dado que los efectos del daño alcanzan esferas psíquicas, familiares y sociales que convocan al campo de la salud mental e imponen una obligación, por parte del estado, de brindar asistencia integral a las víctimas y a todo el tejido social afectado. A partir de la experiencia transitada durante el juicio se puede iniciar un proceso de análisis y comprensión de un momento histórico, no solo en el sentido sociológico o historiográfico que nos compromete como ciudadanos, sino también en cuanto a lo existente, más específicamente en tanto memoria de lo subjetivo. Por esto, el enfoque que le damos a nuestra tarea se plantea incluir el eje de la salud mental.

¿Cómo hacer para volver a la vida como en luego de contar lo vivido? ¿Qué decir luego de haber soportado lo que nadie si quiera se imagina? ¿Cómo volver sin hundirse en ello?

Los testimonios, a pesar de haber sido escuchados y utilizados como prueba no fueron suficientes...



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