

# The Effect of Face to Face Education on Weight Loss of Overweight Patients with Knee Osteoarthritis

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**Background/Purpose:** Osteoarthritis (OA) is the most common arthritis disorder. Obesity has been established as a major risk factor for this disorder. Increasing awareness about nutritional habits and lifestyle modifications may be one of the strategies for controlling obesity.

**Objectives:** To examine the effect of education on weight loss in overweight patients with knee OA.

**Methods:** A case-control study was carried out on 138 participants with convenience sampling. The case group included 73 overweight subjects (BMI>25 kg/m<sup>2</sup>) suffering from knee OA with Kellgren-Lawrence radiographic grading  $\geq 2$ . They were informed about the effect of obesity as an exacerbating risk factor and about correct nutritional habits by face-to-face education and brochures containing useful information. The control group included 65 overweight patients with knee OA with similar clinical and radiographic symptoms and they were not given any education. The participants in both groups were matched in terms of age, gender, VAS pain score, radiographic grading, diabetes, hypothyroidism and educational level. Individuals who used weight-reducing drugs were excluded. Body mass index (BMI) of patients in both groups was calculated before education and after at least 2 months later.

**Results:** In control group, 46 patients and in case group, 44 patients ended the study. In case group, BMI (mean $\pm$ SD) before and after education was 33.24 $\pm$ 3.86 and 32.38 $\pm$ 3.67, respectively which T-paired test showed significant decrease in BMI ( $p < 0.001$ ). In control group, BMI before and after education was 32.45 $\pm$ 4.89 and 32.21 $\pm$ 4.87, respectively without significant difference ( $p = 0.25$ ). Comparison of BMI difference (before and after education) in two groups with t-test showed significant decrease of BMI in case versus control group ( $p = 0.01$ ).

**Conclusion:** Education may be effective in weight loss of overweight patients with knee OA, although this result is not clinically strong. Repeat this study in a higher educated level population with longer follow-up is recommended.