**Review Article** 



Iran J Public Health, Vol. 44, No.1, Jan 2015, pp.1-11

## Tuberculosis Treatment Non-Adherence and Lost to Follow Up among TB Patients with or without HIV in Developing Countries: A Systematic Review

## Habteyes Hailu TOLA, Azar TOL, \*Davoud SHOJAEIZADEH, Gholamreza GARMAROUDI

Health Education & Health Promotion, School of Public Health, Tehran University of Medical Sciences, Tehran, Iran

\*Corresponding Author: Email: Shojae5@yahoo.com

(Received 10 Jun 2014; accepted 11 Nov 2014)

## Abstract

This systematic review intended to combine factors associated with tuberculosis treatment non-adherence and lost to follow up among TB patients with/without HIV in developing countries. Comprehensive remote electronic databases (MEDLINE, (PMC, Pub Med Central), Google scholar and Web of science) search was conducted using the following keywords: Tuberculosis, treatment, compliance, adherence, default, behavioural factors and socioeconomic factors. All types of studies intended to assess TB treatment non-adherence and lost to follow up in developing countries among adult TB patient from 2008 to data extraction date were included. Twenty-six original and one-reviewed articles, which meet inclusion criteria, were reviewed. TB treatment non-adherence and lost to follow up were continued across developing countries. The main factors associated with TB treatment non-adherence and lost to follow up were socioeconomic factors: lack of transportation cost, lack of social support, and patients-health care worker poor communication. Behavioural factors were Feeling better after few weeks of treatments, tobacco and alcohol use, knowledge deficit about duration of treatment and consequences of non-adherence and lost to follow up. TB treatment adherence and lost to follow up. TB treatment adherence and lost to follow up. Therefore, well understanding and minimizing of the effect of these associated factors is very important to enhance treatment adherence and follow up completion in developing countries.

Keywords: Tuberculosis treatment, Non-adherence, Lost to follow up, TB patients

## Introduction

Despite the availability of effective short course regimen first line drug since 1980s (1, 2), TB remains a major global health problem; it causes illhealth and death among millions of people each year and ranks second leading cause of death from an infectious disease worldwide, after human immunodeficiency virus (HIV) (2). Current global estimates indicate that about one in every three people in the world is believed to be infected with *Mycobacterium tuberculosis* (*M. tuberculosis*) and at risk of developing the disease (3). According to WHO global TB report of 2012 there are 8.7 million new cases and 1.4 million deaths in 2011; and almost one million death among HIV positive TB patients (2, 4).

The proportion of TB cases co-infected with HIV is highest in African region countries; overall, African region accounted for 79% of TB cases among people living with HIV (PLHIV) (2, 5, 6), because the synergy between TB and HIV is