

## Original Paper

# Pulmonary Tuberculosis risk factors in hospitalized HIV positive patients in Ahvaz, Iran (2001-09)

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### Abstract

**Background and Objective:** Human immunodeficiency virus (HIV) pandemic is increasing world-wide. Tuberculosis is the main cause of death and low quality of life in HIV infected patients. The prevalence of Tuberculosis in HIV infected patients varies in different areas according to socioeconomic, cultural and geographical situation. This study was done to assess the pulmonary Tuberculosis risk factors in hospitalized HIV positive patients in Ahvaz, Iran.

**Materials and Methods:** In this data based study all medical files of admitted HIV positive patients in Razi hospital in Ahvaz in south west of Iran were reviewed during 2001-09. Demographic characteristics and HIV Tuberculosis related variables were analyzed using SPSS-16, Fisher's exact test and Odds Ratio.

**Results:** Out of 123 HIV cases 99 (80.5%) were injecting drug user (IDU), sixty eight (55.3%) had imprisonment history. Eighty one patients (65.8%) had Tuberculosis, in which 46 had co-morbidities such as infective endocarditis or viral hepatitis, 79 cases were IDU, 61 cases had imprisonment history and 24 cases had CD4 count below 200. There was a significant association between Tuberculosis and IDU, imprisonment and CD4 count ( $P < 0.05$ ).

**Conclusion:** This study showed that the rate of Tuberculosis in HIV positive patients is higher than the rate in previous studies performed in Iran. Also exposure to Tuberculosis cases in prison, IDU and low CD4+ T- lymphocyte count are the main risk factors for Tuberculosis acquisition.

**Keywords:** Tuberculosis, Imprisonment, HIV infection, Injecting drug user

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