Original Paper

The main risk factors of pulmonary tuberculosis acquisition in hospitalized patients in Razi hospital, Ahvaz-Iran (2001-07)

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Abstract

Background and Objective: Risk factors of tuberculosis vary in communities according to different socioeconomic conditions. Knowing these risk factors help to control the disease. This study was done to determine the main risk factors of pulmonary tuberculosis acquisition in hospitalized patients.

Materials and Methods: In this data based, case-control study 173 tuberculosis patients (as cases) and 305 non tuberculosis patients (as controls) hospitalized in Razi hospital in Ahvaz, Iran during 2001-07 were gone under investigation. Risk factors included injecting drug addiction, smoking, HIV infection, diabetes mellitus, imprisonment and corticosteroid usage. Data were analyzed using SPSS-13, Chi-Square and Fisher exact tests. Odds ratio was determined for risk factors.

Results: Frequencies of the main risk factors in case and control groups were as: smoking; 54.3%, 14.8% (p=0.0001, OR: 6.5), HIV infection; 11.5%, 3% (p=0.0002, OR: 4.3), injecting drug addiction; 18%, 3.3% (p=0.0001, OR: 6.7), diabetes mellitus; 22.5%, 5.9% (p=0.0001, OR: 4.6) and imprisonment; 20.2%, 3.9% (p=0.0001, OR: 6.2), respectively. Corticosteroid use and renal failure were similar in cases and controls.

Conclusion: This study showed that smoking, HIV infection, injecting drug addiction, diabetes mellitus and imprisonment were the main risk factors for tuberculosis acquisition in this region.

Keywords: Tuberculosis, Injecting drug addiction, Smoking, HIV infection, Diabetes mellitus, Iran

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