

Original Paper

Risk factors of tuberculosis treatment failure in South-East of Iran

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Abstract

Background and Objective: Failure of tuberculosis (TB) treatment is a major problem of health systems in developing countries. This study was done to identify the Risk factors of tuberculosis treatment failure in the Sistan and Bulochestan province, the high risk region in South-East of Iran.

Methods: This case – control study was carried out on 52 tuberculosis patients (smear -positive and category- I therapy) treated during six months period. Patients with treatment failure were considered as cases and patients with negative smear after 6 months of treatment with anti-tuberculosis (TB) medicines were considered as control group. Demographic, clinical and treatment outcomes were recorded for each patient. The multivariate logistic regression was performed to determine the predictors of treatment failure.

Results: Family history of tuberculosis (95% CI: 1-12.56, OR=3.55, P=0.04), smoking (95% CI:1.58-51.21, OR=9, P=0.01), drug addiction before or during the treatment period (95% CI: 5.28-123.91, OR=25.6, P=0.0001) and low body weight (95% CI:1.05-12.6, OR=3.65, P=0.04) were risk factors for treatment failure.

Conclusion: Family history of tuberculosis, weight loss during treatment, smoking and drug addiction, were considered as risk factors for treatment failure in National Tuberculosis Control Programme (NTCP) in south-east of Iran.

Keywords: Tuberculosis, Treatment failure, Family history, Smoking, Body weight, Drug addiction

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