Determinants of Tuberculosis treatment default in Morocco: Results from a National Cohort Study

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Abstract

Introduction: Studies have shown an association between smoking and tuberculosis (TB) infection, disease and TB-related mortality. We thus documented the impact of smoking and others factors on TB treatment default.

Methods: A cohort of 1039 new TB cases matched on smoking status was followed between 2004 and 2009 in eight Moroccan regions. Treatment default was defined according to international criteria. Univariate analyses were used to assess associations of treatment default with smoking status and demographic characteristics. Multivariate logistic regression was used to adjust for potential confounding.

Results: Patients' mean age was 35.0 ± 13.2 years. The rate of treatment default was 30.2%. Default was significantly higher among men, smokers, persons living in urban areas and non-religious Muslims. After adjusting for confounding variables, factors that remained significantly associated with treatment default were: being male (OR = 3.2; 95% CI: 1.2-8.7), being a non-religious Muslim (OR = 2.0; 95% CI: 1.4-2.9) and living in an urban area OR = 3.0; 95% CI: 1.8-4.9).

Conclusion: The high rate found for default suggests important program's inadequacies and an urgent need for change. Therefore continued research of predictors of default and strategies to reinforce adherence is recommended.

Introduction