Risks factors of multidrug-resistant tuberculosis in Casablanca-Settat Region, Morocco 2012-2016

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Background: Multidrug resistance tuberculosis (MDR-TB) is defined as resistance to isoniazid and rifampicin. In Morocco, the prevalence of MDR-TB is 0.48% in new cases and around 12% in among the restatement cases. The aim of this study was to identify the risk factors for MDR-TB, in Casablanca-Settat region, Morocco.

Methods: This was a case control (1 cases: 2 controls) study design. That has included patients notified as between January 1st, 2012 and the December 31st, 2016 at the Center for the diagnosis of tuberculosis in the region. The cases are patients with MDR-TB and the controls are patients with drug-sensitive tuberculosis. In which the following factors were analyzed: Socio-demographic and clinical characteristics, and MDR-TB patient contact. Data from MDR-TB cases and controls were analyzed using logistic regression. The association between the variables studied and MDR-TB was estimated by Odds Ratio (OR) with the 95% confidence interval. The analysis was performed using SPSS software version 24.0.

Results: One hundred sixty-eight cases and 336 controls were collected. A male predominance was noted in the two groups, the mean age was 37 years for the cases and 35 years for the controls. Multivariate analysis revealed that cases compared to controls were significantly more likely to have had a previous history of retreatment (OR = 60.9) or relapse after antituberculosis treatment (OR = 20.6) or a patient - contact with MDR-TB (OR = 10.5) or a hookah smoker (OR = 3.6) or have a low monthly income.

Conclusion: Our results emphasize that previous history of retreatment with first-line anti-tuberculosis drugs is the main risk factor regained, hence the interest of surveillance close and especially the application of the directly observed treatment, Short-Course (DOTS) strategy.

Biography
Soad Redwane is an epidemiologist in Casablanca-Settat Region - Ministry of Health, Morocco. Her Areas of Expertise is Infectious Diseases (epidemiology and control).

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