DOI: 10.5281/zenodo.4018937 UDC: 616.24-002.5





The risk factors for developing primarily detected pulmonary tuberculosis requiring hospitalization

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Abstract

Background: The risk factors assessment and updating will enable to establish an efficient and targeted policy in the fight against tuberculosis, thus providing a much more efficient management of the limited resources available in the Republic of Moldova. The purpose of the research is to study the impact of risk factors in patients with pulmonary tuberculosis treated within inpatient and outpatient units, as well as the effectiveness of treatment. **Material and methods:** A case-control analytical, cross-sectional, retrospective study was conducted on 243 patients with pulmonary tuberculosis, with negative and positive microbiological results, which were sensitive to treatment. The patients were divided into two groups: the study group (190), the inpatients and the control group (53) that were treated in the outpatient setting.

Results: The risk factors for developing TB that require hospital admission include the following: demographic factors: men (Odds Ratio) (OR) = 3.29, confidence interval (CI) 95% 1.75-6.17), and passive detection method (OR = 3.25, CI95% 1.72-6.11) epidemiological – contact (OR = 3.66, CI95% 1.63-8.21); socio-economic: unfavorable living conditions (OR = 7.4, CI95% 3.63-15.09), unemployment (OR = 4.77, CI95% 2.27-10.06), primary education (OR = 4.59, CI95% 1.05-19.91), secondary education (OR = 5.02, CI95% 1.49-16.89), smoking (OR = 13.86, CI95% 1.86-103.4), alcohol and smoking abuse (OR = 3.47, CI95% 1.18-10.18); medical and biological data: two chronic pathologies (OR = 13.86, CI95% 1.86-103.41), liver pathologies (OR = 3.06, CI95% 1.04-9.01).

Conclusions: Inpatients exhibit more risk factors than outpatients, which leads to a more serious development of TB pathogenesis. The efficient sorting of patients according to hospitalization criteria has contributed to a highly successful treatment rate.

Key words: pulmonary tuberculosis, risk factors.

Cite this article

Feller V, Ustian A. Risk factors in the development of primarily detected pulmonary tuberculosis requiring hospitalization. *Mold Med J.* 2020;63(5):45-50. doi: 10.5281/zenodo.4018937.