13. RISK FACTORS FOR PULMONARY TUBERCULOSIS DEFINED ACCORDING TO THE DRUG-RESISTANCE PROFILE

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Introduction. Tuberculosis (TB) represents a major health problem, listed among 30 countries with the highest burden of the drug-resistant tuberculosis (MDR-TB) and its prevalence is correlated with the risk factors such as socioeconomic conditions, healthcare infrastructure, and public health measures. The MDR-TB is caused by Mycobacterium resistant to isoniazid and rifampicin The most effective anti-TB treatment for drug susceptible TB is standardized, consisting of isoniazid, rifampicin, pyrazinamide, and ethambutol. Lack of the direct observed treatment (DOT) leads to acquisition of the MDR-TB, which reduces the treatment effectiveness and increases the risk for low treatment outcomes, complications and death.

Aim of study. The guidelines and treatment recommendations are updated regularly, and the new drugs are proposed. Therefore, the risk factors for MDR-TB should be continuously monitored. The aim of the study was the assessment of risk factors (RF) for pulmonary TB defined according to the results of the drug-susceptibility tests (DST).

Methods and materials. It was realised a prospective case-control study which included 97 patients with pulmonary TB registered in R Moldova during 2022. Including criteria were adult age, TB with pulmonary localization and signed informed consent. The patients were distributed in the 1st group (1st SG) in which were enrolled 30 patients with DST showing MDR-TB, in the 2nd group (2nd G) – 56 with drug-susceptible TB and 3rd group (3rd G) – 11 which acquired (ac.) MDR-TB during the anti-TB treatment.

Results. Distributing patients by sex was estbalished that the male sex was a low RF for MDR-TB OR=1,35 (CI 95%: 1,09-1, 51), medium RF for ac. MDR-TB, OR=1,4 (CI 95%: 1,22-2,67), urban residence – medium RF for MDR-TB OR=1,8 (CI 95%: 1,51-1,99), and rural residence-high risk factor for ac. MDR-TB, OR=2,5 (CI 95%: 1,92-3.13). The average age in 1st SG was 42.4 y., in the 2nd G=38.2 and 3rd G=49.1. Economicaly disadvantaged state was a neutral peculiarity for MDR-TB, OR=1,09 (CI 95%: 0.87-3.1) and high RF for ac. MDR-TB OR=4.41 (CI 95%: 2.76-5.81). Tobacco smoking was neutral for MDR-TB OR=1,18(CI 95%: 0,98-3.1) and high RF for ac. MDR-TB OR=5.01 (CI 95%: 3.32-6.92), alcohol abuse was high RF for developing drug-susceptible TB OR=4.21 (95%CI:1.41-12.54) and neutral for ac. MDR-TB 1,01 (CI 95%: 8.01-2.3) and comorbid state was a high RF for ac. MDR-TB OR=8,91 (95%CI: 6.8-14.19), HIV-Infection was a high RF for drug-susceptible TB OR=3,9 (95%CI: 2.6-5.1). Economic migration and recent returning from abroad was a high RF

Conclusion. The study demonstrated that high risk on developing of the drug-susceptible TB was caused by the alcohol abuse, HIV-infection and economic migration, but for ac. MDR-TB the economically-disadvantaged state, rural residence, tobacco-smoking, and commodities.

Keywords. Tuberculosis, risk factors, drug resistance