PREDICTING THE RISK OF TUBERCULOSIS IN MEDICAL PERSONNEL

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Abstract

The aim of the study was to develop a method of predicting the risk of tuberculosis among medical workers.

Materials. Official annual reports of Ministry of health of Ukraine and Vinnitsa region for the period 2007-2015, medical records of 131 employees from different medical institutions of Vinnitsa region were analyzed. Following statistical tools were used: student's criterion, Fisher's correlation and determination, uni- and multivariate analysis, discriminant analysis, method of mathematical relationships.

Results. Professional factors posed the greatest influence on the risk of tuberculosis in medical personnel (middle and junior medical staff, working in the reserve, working experience less than 5 years). Social (alcohol abuse and smoking), medical (diabetes mellitus, chronic nonspecific lung diseases, digestive tract diseases), biological factors (female gender and age under 35 years) were less important. Low level position, alcohol use, smoking and work in reserve were the strongest predisposing risk factors.

Conclusion. Using the statistical methods there was offered an original approach for predicting the risk of tuberculosis in medical personnel. It may be used at time of application for an occupancy or lately at prophylaxis examination.

Key words*:* tuberculosis, medical personnel, risk of disease, predicting the risk

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