

PROGNOSIS OF THE TUBERCULOSIS INCIDENCE AND MORTALITY IN UKRAINE

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Abstract

Aim — to develop prognosis of the tuberculosis incidence and mortality on the basis of a comprehensive analysis of 10 year epidemiological data (2005–2015 years) and epidemiological modeling.

Materials — official statistical data on tuberculosis in Ukraine for 2005–2015 years.

Results. It was established that improvement the social-economic situation in Ukraine, overcoming the epidemic of HIV infection and adequate control of drug-resistant tuberculosis could decline the incidence of the disease by 5,0–7,0 % and mortality — by 10,0 %, yearly. Considering the decrease of tuberculosis all forms morbidity from 67,9 in 2013 to 55,9 per 100 000 of population in 2015, it was demonstrated by means of polynomial two-stage trend method that in the next 10 years (until 2025) the incidence of all forms of active tuberculosis would go down to 40,0 per 100 000 of population, despite even 5,0 % higher value in 2016. The probability of such a development of epidemiological situation is high — $R^2 = 0,98$. Prognosis of the mortality from all forms of tuberculosis indicates that in 2025 the mortality rate may be reduced to 5,0 per 100 000, but the likelihood of achieving this is low ($R^2 = 0,49$).

Reforming of the tuberculosis service should be carried out taking into account current prognosis. This is crucial for the development of better tuberculosis control measures.

Key words: tuberculosis, prognosis, incidence, mortality.

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