

THE INCIDENCE AND PREVALENCE FORECAST OF TUBERCULOSIS IN UKRAINE AND NIGERIA TILL 2014 AND MAIN MEASURES TO STOP TUBERCULOSIS PROPAGATION

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The purpose of the work consists of study and comparison of the dynamics of incidence and prevalence of tuberculosis in Ukraine and Nigeria and the development of the forecast of these indices until 2014.

Nigeria has the world's fourth largest tuberculosis burden, with nearly 374000 estimated new cases annually. In Ukraine in 2011 it was registered nearly 40000 new cases of tuberculosis. The feature of the epidemic in Ukraine is that it combines three components: normal tuberculosis epidemic that is treatable by traditional methods, the epidemic of multi-drug resistant tuberculosis and co-infection epidemic of TB / HIV.

According to the WHO report data of 2000-2011, we predicted levels of incidence and prevalence of tuberculosis in both countries. In Nigeria and Ukraine was recorded a decrease in the incidence and prevalence of tuberculosis over the last decade. For analysis of basic tendencies of incidence and prevalence of TB in Ukraine and Nigeria the method of levelling of dynamic numbers after the parabola of the first order was applied. The forecast of incidence of tuberculosis in Ukraine (per 100000 population) is the following: in 2012 –86,6; 2013 – 81,3; 2014 – 76,6; in Nigeria respectively: 357,8; 366,6; 375,4. The forecast of prevalence of tuberculosis in Ukraine in 2012 – 120,5; 2013–124,5; 2014– 128,5; in Nigeria respectively: 511,1; 507,4; 503,2 per 100000 population.

The negative tendencies of the propagation of tuberculosis both in Nigeria and in Ukraine are caused firstly by socio-economic reasons, living conditions, by action of polluted environment, by small accessibility of qualified medical help, by low effectiveness of drug therapy and methods of treatment connected with the specific character of the contingent of patients. At the same time, the nature of the propagation of tuberculosis in Ukraine and Nigeria has a number of distinctive special features. In Ukraine the adaptation of the agent of tuberculosis to the old anti-tubercular preparations is the basic problem (both by the way of the acquisition of stability and by the way of the propagation of resistant forms).

In contrast to Ukraine, the basic problem in Nigeria is a propagation of tuberculosis among HIV-positive. The combination of tuberculosis and HIV is fatal because each agent strengthens the action of the other.

It is necessary to note the role of specific preventive prophylaxis (vaccination) as the most promising way to decrease the level of prevalence of tuberculosis. It is known that the effectiveness of vaccination increases with the observance of such rules - the scope by the BCG vaccine is not less than 95% in all newly born and conducting revaccination is not less than 90% of those vaccinated. Undoubtedly, in Ukraine the effectiveness of vaccination is higher than in Nigeria, which makes it possible to decrease the frequency of the disease, disseminated and progressive forms of tuberculosis, and also morbidity and mortality. This situation is connected with the special features of the material state of wide strata of society (specific part of the women in Nigeria is birth children at home), the insufficient volume of anti-tubercular measures, and worse state of material and technical base of pulmonology service.

The stabilization of the situation can be achieved by the way of STOP- TUBERCULOSIS program implementation (expansion and improvement of high-quality treatment of tuberculosis (DOTS); fight against HIV-associated with tuberculosis, multidrug-resistant tuberculosis; helping to strengthen the public health system; all suppliers of medical services involvement; expansion of possibilities for tuberculosis patients to work and live in the society; supporting the development of scientific studies).