

# Predictive analysis of the situation of tuberculosis in the world based on the results of the annual WHO report

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## ОГЛЯДОВА СТАТТЯ

**BACKGROUND.** A statistical analysis published in the WHO report for 2019 showed that almost 10.0 million people (about 9.0-11.1 million) fell ill with tuberculosis (TB) worldwide in 2018.

**THE PURPOSE** of a systematic examination and analysis of the WHO report is to summarize the achievements and study of complex issues in overcoming tuberculosis in the world at the present stage, that need more attention, more scrutiny, or a change in approach to addressing specific challenges towards achieving the strategic global goals for eradicating this infection.

**MATERIALS AND METHODS.** We used test access to such full – text and abstract databases: a single package of the information database EBSCO; the largest abstract and citation database of peer-reviewed literature Scopus; Google Scholar; MEDLINE with Full Text; MEDLINE Complete; Dyna Med Plus; EBSCO eBooks Clinical Collection; Web of Science Core Collection WoS (CC); SCIE (Science Citation Index Expanded); SSCI (Social Science Citation Index); AHCI (Artand Humanities Citation Index).

**RESULTS AND DISCUSSION.** By geography, most TB cases in 2018 were reported in the WHO regions: Southeast Asia – 44 %, African – 24 % and Western Pacific – 18 %. Lower percentages were recorded in the Eastern Mediterranean (8 %), America (3 %) and Europe (3 %). Eight countries account for two – thirds of the world's total TB cases: India (27 %), China (9 %), Indonesia (8 %), Philippines (6 %), Pakistan (6 %), Nigeria (4 %), Bangladesh (4 %) and South Africa (3 %). These and 22 other countries on the WHO list of 30 high tuberculosis countries account for 87 % of TB worldwide. Multidrug-resistant tuberculosis (MDRTB) continues to be a public health threat worldwide. In 2018, about half a million new cases of rifampicin-resistant tuberculosis were reported (of which 78 % had multidrug-resistant tuberculosis). The three countries with the largest share of the global MRTB burden are India (27 %), China (14%) and the Russian Federation (9 %). Globally, 3.4 % of new cases of tuberculosis and 18% of previously treated cases are tuberculosis with extensively resistance or rifampicin-resistant (MDR/RR-TB), with the highest rates of detection (>50 % in previously detected cases) in the countries of the former Soviet Union.

**CONCLUSION.** The epidemic situation in TB in the world and Ukraine remains complex and at this stage has certain peculiarities, and the prognosis for its overcoming shortly is rather doubtful. There is a tendency to reduce the incidence of tuberculosis, but several complex and controversial issues have been outlined for the eradication of this infectious disease by WHO's End TB strategy.

**KEYWORDS:** tuberculosis, epidemiology, morbidity, mortality, the effectiveness of treatment.