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Standard Operating Procedures for tuberculosis care

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Standard Operating Procedures for tuberculosis care

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Background

According to the World Health Organization (WHO), tuberculosis (TB) is the most important cause of mortality from infectious diseases with 1.4 million deaths and 10.4 million cases of disease in 2015 (1). Furthermore, the high global TB burden was compounded by an estimated 480,000 new cases of multidrug-resistant TB (MDR-TB) and 100,000 patients with rifampicin-resistant TB (RR-TB), which are more difficult to treat, in 2015 (1). In the WHO European Region, 36,970 deaths were reported, in association with over 320,000 TB incident cases (1,2).

Worldwide, the annual decline of the TB incidence rate from 2014 to 2015 was only 1.5%. However, to achieve the first milestones of the End TB Strategy this indicator should increase at 5% by 2020 and then accelerate further (2).

Although TB disproportionately affects vulnerable population groups (*i.e.*, individuals at higher risk of exposure to discrimination, hostility, or economic adversity, such as migrants and refugees, immune suppressed individuals either for HIV infection or biological therapy), the *Mycobacterium tuberculosis* transmission does not respect any borders and can virtually involve anybody living in high-, middle- and low-income countries. The occurrence of the disease generates unacceptable human suffering and catastrophic costs to patients and their families, as well as to the society as a whole (3-6).

Thus, sustainable and effective efforts are needed to ensure quality prevention, diagnosis, and treatment for TB and Latent TB Infection (LTBI) (5,6).

Those should be immediately implemented as integral part of both the human rights of the affected individuals and the public health pre-requisites to control and eliminate TB, while preventing further development of multidrug-resistant TB (MDR-TB) and extensively drug-resistant TB (XDR-TB) (7,8).

On the occasion of the World TB Day 2017 and as a strong message contributing to the Ministerial Conference 'A multisectoral response to End TB in the sustainable development era', to be held in Moscow on 16-17 November 2017, the European Respiratory Society (ERS) and the UNION (International Union against Tuberculosis and Lung Disease) Europe Region would like to highlight the following statements:

1. TB is neither highly virulent nor easily transmitted, and is treatable. Therefore, efforts should be implemented to rapidly detect and treat it (both drug-susceptible and M/XDR-TB cases). Provision of adequate treatment is, in fact, essential to break the chain of transmission within the community, while protecting uninfected individuals by the extent possible (5, 6, 8);

2. Diagnosis of LTBI, TB, and M/XDR-TB is not always easy to perform in all settings and circumstances, particularly in centres hosting large numbers of at high-risk individuals including migrants and refugees (4,9-15); therefore, national political commitment is immediately required to address this important gap in the cascade of care;

3. Sub-optimal or inappropriate medical management of LTBI, TB, and M/XDR-TB and/or inadequate follow-up of individuals or patients will hinder TB control and elimination efforts (5,6,9); therefore, education of healthcare workers and identification of reference centres should be a priority to improve the public health outcomes and reduce the waste of healthcare-related financial resources.

Recommendations

Health authorities, national TB programmes, national and international technical agencies, civil society organisations and donor agencies are urged to prioritise TB, prevention, care and control, particularly among the most vulnerable populations and are strongly recommended to:

TB prevention

- Implement the necessary infection control measures (managerial activities, administrative and environmental controls, personal protection) (9-11);
- Implement the principles of the WHO LTBI guidelines in terms of both diagnosis and treatment (6);
- Implement the LTBI monitoring and evaluation activities recently proposed by WHO (6,16);
- Advocate for more effective medicines for LTBI management including the registration of rifapentine in Europe to allow the prescription of shorter and effective regimens to treat LTBI (6);

- Promote research on new, effective vaccines and diagnostics and shorter and more effective treatment regimens (1);

TB diagnosis

- Scale-up rapid diagnosis of TB and drug resistance forms using the diagnostic WHO endorsed molecular methods and referral of the patient to treatment services (1,5,9,17);

TB treatment

- Ensure people-centred, age-sensitive, gender-specific services supporting adherence and universal access to TB services (1,5,9,17);
- Ensure adequate treatment of drug-susceptible cases, to achieve the highest success rate;
- Implement quality-based management of drug-resistant and MDR-TB cases;;
- Promote the use of therapeutic drug monitoring (TDM) to prevent, detect and manage of adverse events (18,19);
- Promote continuous medical education on TB for all healthcare workers potentially in charge of TB cases.
- -Consider psychosocial support and relevant measures to enable and support the patients and their families complete their treatment.

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