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Editorial

World Tuberculosis Day 2023 theme “Yes! We Can End TB!”

World Tuberculosis (TB) Day marks the day in 1882 when Robert Koch announced the discovery of *Mycobacterium tuberculosis* (*Mtb*), the bacterium that causes TB. World TB Day is observed annually on March 24 to raise awareness about TB, a disease which despite effective treatment being available generates a high death number burden worldwide. “Yes! We Can End TB!” is the World Health Organization (WHO) and STOP TB Partnership theme for World TB Day March 24, 2023 [1]. The theme is a message of generating hope and a plea for re-establishing high-level political leadership for increased global funding to enable faster uptake of new WHO management recommendations for finding, diagnosing, and effectively treating all cases of TB using new WHO recommendations. World TB Day also provides opportunities to refocus global attention on TB after the past 3 years of distraction by the COVID-19 pandemic. A critical challenge will be to garner political support and obtain funding commitment for achieving the United Nation (UN) Sustainable Development Goals (SDGs) targets for global TB control at the 78th UN General Assembly (UNGA) on TB to be held in New York in September 2023. UNGA member states must be urged to commit themselves to accelerate the rollout of the new WHO-recommended shorter all-oral treatment regimens for drug-resistant TB.

About a quarter of the global population (1.7 billion people) is estimated to have been infected with *Mtb* [2]; although, most people (more than 90%) do not progress to TB disease during their lifetime [3]. The disease typically affects the lungs (pulmonary TB) but it can also affect other sites (extrapulmonary TB). The currently recommended treatments for drug-sensitive TB (a 4–6-month course of anti-TB drugs) can cure about 85% of affected adults and children [4]. New regimens to treat multidrug-resistant (MDR)-TB in as short as 6 months are now available [4,5]. Regimens of 1–6 months are available to treat TB infection [6]. Universal health coverage is necessary to ensure that all people with disease or infection can access the treatments. The number of people acquiring infection and developing disease (and in turn, the number of deaths caused by TB) can also be reduced through multisectoral action to address TB determinants [7], such as poverty, undernourishment, HIV infection, smoking, and diabetes [6,8].

The COVID-19 pandemic has reversed years of progress made in the fight to end TB [9–13] and has increased the worldwide TB case load, numbers of deaths, and caused disruption of essential TB services worldwide [9–13].

World TB Day presents an opportunity to highlight that TB is the second most important cause of death from an infectious disease worldwide (after COVID-19), with 1.6 million estimated deaths

in 2021 [2], and it deserves continuous attention and financing despite competing priorities. There is an urgent need for rapid scale-up of action and investments in TB health services across the world because the 2022 targets of the UNGA High-Level Meeting on TB, which was set in 2018 (UNGA, 2018), have not been achieved yet [14]. To achieve TB elimination, increased investments are required through accelerating the promising new TB vaccines pipeline and implementing preventive therapies, point-of-care new rapid molecular diagnostic tests, and continuous access to more efficient oral drug treatment regimens for sensitive and resistant *Mtb* strains in children and adults.

Knowing the work ahead, it is important to acknowledge the successes reached in 2022 by many TB high burden countries to recover from the impact of COVID-19 epidemic and to ensure access to diagnostics, updated treatment regimens in adults and children, digital technology, and artificial intelligence to provide a TB response. Great efforts have also been done to increase the engagement of those affected by TB, involving the communities and the civil society who are leading the movement toward ending this disease. All these need to be factored in for a comprehensive worldwide TB control plan. In this special *IJID World TB Day* issue to commemorate World TB Day, we present nine reports covering several of these aspects: impacts of COVID-19 on the diagnosis of TB, MDR-TB, and on mortality [15]; characterization of immune inflammation of TB-COVID-19 coinfection [16]; the impact of COVID-19 on increasing non-communicable diseases, such as diabetes [17]; updated drug-resistant tuberculosis treatment regimens [18]; need of new formulations of TB drugs, especially for MDR-TB, for children [19]; importance of the engagement of those affected by TB in the clinical trials [20]; new proposed strategies to design new TB vaccines, such as the mRNA technology [21]; characterization of the TB vaccine-induced immunity in newborns [22]; the necessity to have genomic and geospatial epidemiology of *Mtb* at a local level, as reported in Oman [23]; and the urgent need to have programmatic management of TB preventive treatment (PMTPT) [24].

The Global Plan to End TB 2023–2030 by the STOP TB partnership [25] highlights a positive message of hope that we really can end the TB pandemic by 2030 if all stakeholders from UN member states, policy makers, scientists, and funders of affected communities can mobilize their collective energy, knowledge, technologies, and resources to make TB a global priority, demanding sufficient funds and make appropriate interventions for prevention, diagnosis, and treatment services available to all people everywhere.

Declaration of competing interest

The authors have no competing interests to declare.

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Delia Goletti*

Translational Research Unit, Department of Epidemiology and Preclinical Research, National Institute for Infectious Diseases L. Spallanzani-Istituto di Ricovero e Cura a Carattere Scientifico (IRCCS), Roma, Italy

Seif Al-Abri

Directorate General for Disease Surveillance and Control, Ministry of Health, Muscat, Oman
International Society for Infectious Diseases, Brookline, USA

Giovanni Battista Migliori

Servizio di Epidemiologia Clinica delle Malattie Respiratorie, Istituti Clinici Scientifici Maugeri IRCCS, Tradate, Italy

Rhea Coler

Center for Global Infectious Disease Research (CGIDR), Department of Global Health, University of Washington, Brotman Baty Institute, Seattle Children's Research Institute, Seattle, USA

Catherine Wei Min Ong

Infectious Diseases Translational Research Programme, Department of Medicine, National University of Singapore, Tower Block, Singapore; Division of Infectious Diseases, Department of Medicine, National University Hospital; Institute for Health Innovation and Technology (iHealthtech), National University of Singapore, Singapore

Susanna Maria Roberta Esposito

Pediatric Clinic, Pietro Barilla Children's Hospital, Department of Medicine and Surgery, University Hospital of Parma, Parma, Italy

Marina Tadolini

Infectious Diseases Unit, IRCCS Azienda Ospedaliero-Universitaria di Bologna, Bologna, Italy
Department of Medical and Surgical Sciences, Alma Mater Studiorum University of Bologna, Bologna, Italy

Alberto Matteelli

Institute of Infectious and Tropical diseases, WHO Collaborating Centre for TB prevention, Department of Clinical and Experimental Sciences, University of Brescia, Brescia, Italy

Daniela Cirillo

Emerging Bacterial Pathogens Unit, WHO Collaborating Centre in Tuberculosis Laboratory Strengthening, Division of Immunology,

Transplantation, and Infectious Diseases, IRCCS Ospedale San Raffaele, Milan, Italy

Elisa Nemes

South African Tuberculosis Vaccine Initiative, Department of Pathology, Institute of Infectious Disease and Molecular Medicine and Division of Immunology, University of Cape Town, Cape Town, South Africa

Alimuddin Zumla

Centre for Clinical Microbiology, Division of Infection and Immunity, University College London, and NHIR-BRC, UCL Hospitals NHS Foundation Trust, London, United Kingdom.

Eskild Petersen

Directorate General for Disease Surveillance and Control, Ministry of Health, Muscat, Oman
Institute for Clinical Medicine, Faculty of Health Science, University of Aarhus, Denmark and ESCMID (European Society Clinical Microbiology and Infectious Diseases), Emerging Infections Task Force, Basel, Switzerland

*Corresponding author:

E-mail address: delia.goletti@inmi.it (D. Goletti)

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