

Systematic screening for tuberculosis disease: Adapting and implementing global recommendations to meet local context

Date: Tuesday 9 November 2021

Time: 13:00 to 16:00 CEST

Registration link for course: https://us06web.zoom.us/meeting/register/tZlvc-Gsrz8tHNbH_RZFgidDR8QbkloRpCnt

Objectives of the workshop: The objectives are to discuss the main features of the 2021 WHO recommendations on systematic screening for tuberculosis disease, to familiarize participants with the main guiding principles and ethical issues inherent in TB screening as well as to present digital tools developed by WHO to assist countries with planning and implementing TB screening interventions in the local context.

After attending this workshop participants will be able to:

- Understand the latest WHO guidance on TB screening, including recommendations on what populations should be screened and what tools are to be used.
- Explain key elements of a functional system for implementing and scaling up the systematic screening of TB disease, including the platforms and mechanisms to have in place for policy development, decision making and resource mobilization.
- Describe what testing options should be made available for screening (symptom screen, chest radiography, computer-aided detection software, C-reactive protein, molecular WHO-recommended rapid diagnostics) and how these should be implemented.
- Describe how people at risk should be identified for screening and how the testing algorithms would be applied to overcome barriers and complete screening.
- Explain how the data to calculate the main indicators for screening can be collected and how operational research including local calibration of CAD could inform enhancements to screening efforts.

Session sponsor: World Health Organization, Global Tuberculosis Programme

Chairs: Prof Jeremiah Chakaya, Liverpool School of Tropical Medicine and Dr Etsy Febriani, the Civil Society Task Force Indonesia

Coordinators: Saskia Den Boon, WHO and Guy Marks, UNSW Sydney

Target audience: National TB programme managers, NTP technical staff, consultants, staff from technical agencies

Speakers:

Cecily Miller: Updated recommendations, key principles and ethical considerations for systematic screening of TB disease

This presentation will explain updated and consolidated WHO recommendations on systematic screening for TB disease. It will address the role of TB screening in implementing TB preventive treatment, as well as detecting and treating TB early, to reach the targets of the End TB Strategy, the UNHLM political declaration and support other efforts toward TB elimination in some countries. It will discuss the balance of benefits and risks inherent in TB screening for both individuals and community, and why screening should be offered to some individuals and not others, as well as the principles and ethical considerations underpinning TB screening.

Imran Pambudi: Developing and implementing a TB screening programme

In this presentation the various platforms and mechanisms for policy development, decision making and resource mobilization to implement and scale up TB screening at national level are discussed. These include 1) national policies and guidelines, along with resources to support implementation; 2) strategies for demand creation including engagement with civil society, coordinated messaging across health and non-health sectors; 3) human resource capacity building; 4) engagement, adaptation and strengthening of procurement and supply chain management, information technology and other health infrastructure and 5) the major costing considerations for resource mobilization, and the budget implications of different decisions about programme design.

Saskia Den Boon: Prioritizing populations and choosing tests and algorithms for screening

This presentation focuses on how to identify and prioritize risk groups for screening. This session will create understanding about what tools are available for screening for people living with HIV and other high-risk groups (children and adults) and how these can be combined into accurate algorithms for maximizing detection of TB and initiation of TPT and guiding efficient use of diagnostic testing resources. The session also familiarizes the participants with the Screen TB tool, an online tool designed to help users estimate and compare the performance of screening programmes in different risk groups and using different screening algorithms.

Vanessa Veronese: Implementation and calibration of CAD software for TB screening or triage

This session will cover the implementation requirements around the use of CAD software products for automated detection of TB in screening or triage settings, including the need for calibration of CAD and the process of selecting the desired threshold, based on desired accuracy and costs. The session will also introduce the CAD calibration toolkit, designed to assist users to conduct a local calibration operational research study, and the CAD for TB Detection tool to assist users with analyzing data from a CAD calibration study, to select the desired CAD threshold and estimate the performance of CAD in a new setting.

Jacob Creswell: Monitoring & evaluation, and operational / implementation research

Because TB screening is always more resource intensive than routine case finding, and results are heterogenous across different populations, monitoring and evaluation of screening programs is critical for decision making. This session introduces participants to the main performance indicators for TB screening, defines their numerators and denominators, possible stratifications, and explains how they should be generated and interpreted to for programme monitoring. In addition, priority areas for implementation research are discussed to enable scale. Participants will be taken through different examples of how the screening cascade can be tracked for different types of interventions and what data sources are used.

Chairs and Speakers' biographies

Dr. Esty Febriani MKes is a public health expert and representative of faith-based organization - Nahdlatul Ulama (NU) from Indonesia. She had more than 20 years' experience to work in International and local CSO for Maternal Neonatal program, HIV and Tuberculosis. Currently, she plays many roles. She leads the maternal and neonatal project, a member of Civil Society Task Force (CSTF) WHO, a lecturer in public health master's degree in health Institute, STIKKU and now establish a new local NGO, Lentera foundation. While, she is also active as a researcher, especially for community empowerment issues.



Dr. Jeremiah Chakaya is a Professor of Global Respiratory Health, at the department of clinical sciences, Liverpool School of Tropical Medicine. Prof. Chakaya was born and educated in Kenya where he practices and teaches respiratory medicine. He graduated from the University of Nairobi with a basic degree in medicine and surgery (MBChB) in 1985 and a master's degree in internal medicine (M.Med) in 1992. He then went on to study lung medicine at the National Lung and Heart Institute,

University of London at the Royal Brompton Hospital and at the Kyorin University Hospital in Tokyo, Japan. Prof. Chakaya worked as a TB and Lung disease researcher at the Centre for Respiratory Diseases Research at the Kenya Medical Research Institute and later served as the TB Program Manager at the Ministry of Health between 2003 and 2006.



Dr Cecily Miller is an epidemiologist and technical officer in the TB Prevention, Diagnosis, Treatment, Care & Innovation unit at WHO's Global TB Programme in Geneva. Her focus is on screening for TB and digital innovations in TB care. Prior to joining the WHO she worked for 10 years in the Center for TB at the University of California San Francisco, focused on clinical and programmatic research on TB diagnosis and screening interventions and in global health education.



Imran Pambudi - Imran Pambudi is National TB Program Manager in Ministry of Health Indonesia and Steering Group Member of TB PPM Learning Network. Prior to joining NTP, he worked in International Health Cooperation Unit and Public Health Division in MoH. He is expert on Global Health and Quality of Care. He studied Medicine in Airlangga University and holds a Master of Primary Health Care Management from Mahidol University.



Dr Saskia den Boon is a technical officer in the TB Prevention, Diagnosis, Treatment, Care & Innovation unit of the Global Tuberculosis Programme of WHO in Geneva. Her focus is on TB screening and prevention as well as research and innovation. She previously worked as a consultant for the WHO Department of Immunizations, Vaccines and Biologicals and before that was a research coordinator for the University of California San Francisco, based in Kampala, Uganda. Saskia holds a MSc in Health Economics, Policy and Management from the LSE, and a PhD in tuberculosis epidemiology from the University of Amsterdam.



Dr Vanessa Veronese is an Australian public health professional with a solid background in infectious diseases, particularly HIV, TB and COVID-19. Vanessa has a PhD in epidemiology and a Master of International Public Health and is interested in epidemiology, implementation research, and programme development. Vanessa has worked in, and supported research and public health programming related to infectious disease control across a variety of settings in South-East, and South Asia, Australia, and West and Central Africa. Vanessa joined the Special Programme for Research and Training in Tropical Diseases (TDR), at the World Health Organisation in Geneva, Switzerland in September 2019.

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Dr. Jacob Creswell is Head of Innovations & Grants at the Stop TB Partnership. He coordinates the TB REACH initiative focused on improving programmatic aspects of tuberculosis case detection and treatment outcomes. He serves as a global expert on different aspects of improving tuberculosis case detection and active case finding. Jacob is currently working on the introduction of new diagnostic and screening tools for TB and how they can fit into more efficient diagnostic algorithms. Jacob has over 20 years of experience at Stop TB, WHO and CDC on TB and HIV issues.