

PhD defence Michel Kaswa

Diagnosis of Multi-Drug Resistant (MDR) tuberculosis in the Democratic Republic of the Congo

06 jul 2018 17:00

University of Antwerp - Wilrijk

Reservatie aangeraden



Dit is de omschrijving

Supervisors:

- Prof. Dr. Marleen Boelaert (ITM)
- Prof. Dr. Greet Ieven (University of Antwerp)
- Prof. Dr. Jean-Jacques Muyembe (Institut National de Recherche Biomédicale, DRC)

Co-supervisor:

- Dr. Armand Van Deun (ITM)

Summary:

Multidrug-Resistant Tuberculosis (MDR-TB), defined as the resistance of clinical isolates of *Mycobacterium tuberculosis* strains against Rifampicin (RMP) and Isoniazid (INH) is considered as a serious threat which jeopardizes the worldwide efforts to control Tuberculosis (TB). Conventional methods for diagnosing MDR-TB are slow and cumbersome requiring at least two months for test execution, and the treatment is complicated. In Low-Income Countries such as the Democratic Republic of the Congo (DRC), the challenge posed by MDR-TB is vast. Over the two last decades, the history of the DRC has been rife with civil unrest, which has led to the collapse of the health system and the recrudescence of TB and other infectious diseases. DRC is considered as one of the 27 countries with a high burden of MDR-TB, but the actual data on the magnitude, trends, and the distribution of MDR-TB in DRC are scanty. In 2008, the World Health Organization (WHO) estimated that the total number of MDR-TB cases in DRC was 5600 (95%CI: 530-11 000). However, less than 2% of this estimated number was detected and put on specific treatment during that same year. Extremely long turn-around times for laboratory results to reach the treating clinician increase the risk of the spread of resistant strains. The goal of this thesis was to provide the National TB Program (NTP) of DRC with evidence and guidance on how to improve the programmatic management of MDR-TB. This thesis provides key information on the emergence of drug-resistant TB in a high-burden country, DRC, its public health impact, experience gained in patient management and strategies for addressing drug resistance within NTP in DRC. Laboratory services, although crucial for national disease control programmes, are often the weakest link in the health system, receiving low priority and inadequate resources. For TB control, quality-controlled bacteriological examination is essential for the diagnosis and management of TB patients. Laboratory strengthening is a priority, including improved access to and use of existing diagnostics as well as the development and implementation of appropriate new technologies.

