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Due to their special background and characteristics, prisoners are by definition a vulnerable population group and a Most At Risk Population (MARP) for TB. The rapid spread of communicable diseases such as TB and HIV are a known threat in corrective facilities, and high rates of TB are observed among those remanded to the penal system. The general prison environment increases the risks of new TB infection, progression of latent TB infection to active disease, and even death. The risk for disseminated infection and transmission is exacerbated by the high rate of HIV infection among the prison population. Delayed diagnosis in and outside of prisons, as well as difficulties in ensuring the completion of treatment in a prison setting, also result in prolonged transmission. This, together with incomplete or interrupted treatment, can lead to drug resistance and subsequently to high case fatality. Effective TB control in prisons is necessary to protect the well-being of prisoners, wardens and, after the release of prisoners, the wider community. The possible consequences of poor TB control are disastrous in a country with limited resources, such as Tanzania. Many complicated screening algorithms to identify active TB cases in prisoners have failed in the past, and a simple and quick approach is urgently needed.

This TB REACH wave 3 initiative in Tanzania builds on lessons learnt from a two-year TB REACH wave 1 project, in which part of the target population was prisoners in the Mbeya Region in the South East of the country. As the main grant holder, the Department of Infectious Diseases and Tropical Medicine in Munich, Germany (LMU), together with local collaborators, is aiming to extend the experiences from the previous intervention and to scale up TB case detection among prison inmates and new admissions to five central prisons located in three regions across Tanzania. Reliable epidemiological data on the prevalence and incidence of TB in the prison environment is collected in all included corrective facilities to enable more effective planning and possibly new policy formulation for TB control in all the Tanzanian penitentiary institutions.

Tanzanian corrective facilities accommodate about 45,000 men and women in 127 institutions across the country. About 7,800 inmates and around 33,600 new admissions to the five identified penitentiary institutions are expected to be screened by wave 3 activities over the course of two years. The intervention is using a novel and proven effective diagnostic technology, the Xpert MTB/Rif assay, or a short screening algorithm with chest X-ray screening followed by a confirmatory Xpert MTB/ Rif assay. Due to the high burden of HIV among the prison population, HIV testing and counseling is integrated into this activity since it is routinely offered to the prison population as an optout strategy in the context of the routine prison HIV/AIDS program.

Screening activities started in stages with the introduction of the project in all five intervention sites complete as of early 2014. As of July 2013, after a lengthy process involving activities needed to begin implementation, a total of 5,035 prisoners have been screened and 58 positive Xpert cases identified. Only 44% of all microbiologically positive cases showed any typical TB symptoms. In order to raise awareness and to ensure sustainability, prison staff implements all activities. Training and supervision is carried out by staff from the NIMR-Mbeya Medical Research Centre (MMRC) and Stichting PharmAccess International (PAI), as well as Bugando Medical Centre staff in Mwanza who are supported through the Medical Mission Institute in Wuerzburg, Germany.



It is expected that over the course of two years, untreated active infectious TB cases among prisoners will have been significantly reduced. With the ongoing TB REACH prison program supported, supervised and monitored by the NTLP, the infectious TB reservoir among prisoners could be substantially reduced if not eliminated, with a concomitant impact on

transmission in the wider communities after

prisoner release.



