Hospital-Based Interventions for Tuberculosis Infection Control in Beira Central Hospital, Mozambique: an Exploratory Qualitative Study

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Background: One of the main tuberculosis (TB) reduction strategies is the early detection and rapid administration of proper anti-TB treatment1-2. A study in Beira has shown that diagnostic delays persist due to poor health-seeking behavior as well as healthcare system or in-ward delays that hinder TB diagnosis and treatment3. As noted during our pilot study, Beira Central Hospital, the second largest hospital in Mozambique, suspected TB patients are frequently not adequately screened for TB when they are admitted, and often experience delays of days or weeks before getting diagnosed and treated, which potentially exposes health care providers as well as other patients, many with human immunodeficiency virus (HIV), to Mycobacterium TB (MTB). We aimed to assess the acceptance and feasibility of having a hospital-based cough officer and a 24-hours tuberculosis laboratory, prior to the implementation of a tuberculosis infection control intervention.

Methods: In-depth interviews and focus group discussions were conducted with auxiliary workers, nurses, tuberculosis laboratory technicians, medical doctors, managers and decision-makers at Beira Central Hospital, Mozambique. Audio-recording and written notes were taken and content analysis was performed through atlas.ti7.

Results: The majority of participants pointed out that a hospital-based cough officer is an accepted figure but due to the scarcity of human resources, their duties should be performed by auxiliary workers. Interviewees stated that although the clinical laboratories of the hospitals in Mozambique are working 24-hours/day, there is no TB services provision (laboratory and treatment centers) after 3:00 PM, on weekends or on (inter)national holidays. A tuberculosis laboratory installed by the emergency room and treatment sites working 24-hours/day is considered useful to reduce associated delays. Availability of TB services together with a hospital-based cough officer are expected to contribute to early detection, treatment and isolation of confirmed tuberculosis patients.

Conclusion: Promotion of a hospital-based cough officer and the availability of a 24-hour tuberculosis laboratory are acceptable and feasible and seem to be promising strategies for tuberculosis infection control in the Beira Central Hospital settings. Applying qualitative methodologies before implementing a new intervention seems to be very useful to ensure local and sustainable strong evidence-based implementation science approaches, particularly when a new health intervention is to be introduced. For early detection, initiation of proper TB treatment and protection of health care workers from TB, health authorities in Beira Central Hospital, may need to adopt and promote acceptable, affordable and sustainable practices, such as expanding working hours of the TB lab and making hospital-based cough officers available.
Keywords: Tuberculosis; hospital infection control; acceptance and feasibility; Mozambique

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