FACTORS ASSOCIATED WITH THE FEASIBILITY AND ACCEPTABILITY OF UNIVERSAL TB SCREENING IN PRIMARY HEALTHCARE CLINICS IN JOHANNESBURG.

ABSTRACT

Background: TB is an airborne disease that is of great public health importance as every living individual is at risk of infection. Despite TB being a preventable and curable disease, health providers and patients attending healthcare facilities remain at an increased risk of exposure to the disease. This is as a result of the poor implementation of the TB infection prevention and control measures, despite these having been recommended by the National Department of Health and WHO. Particularly, screening for TB symptoms in everyone entering health facilities as soon as they arrive has been identified as one of the first lines of defence against the spread of the disease. The primary aim of screening all who visit health facilities as soon as they arrive is to assist health providers with early identification, diagnosis and treatment of TB suspects, however, studies show that this is not routinely practised. Moreover, many patients attending health facilities are often missed as TB cases despite reporting TB symptoms. Two probable explanations for the poor adherence to the guidelines are that the guidelines 1) are not perceived as feasible and 2) they are not acceptable to health providers. However, this has not been investigated as many feasibility and acceptability studies are usually conducted prior to implementation. Therefore, this study contributes to the Implementation Science literature by investigating the perceived feasibility and acceptability of the guidelines to screen all patients for TB symptoms as soon as they arrive at health facilities.

Methods: Data were collected in 14 primary healthcare facilities in the City of Johannesburg district. Within these facilities, 69 health providers who have ever been involved in screening patients for TB symptoms were approached and they consented to participate in the study. A survey was developed and administered via the REDCap application to collect health providers' characteristics, organisational facilitators and guidelines characteristics. Two outcome variables, feasibility and acceptability scores, were measured using the Feasibility of Intervention Measure (FIM) and the Acceptability of Intervention Measure (AIM) scales which are measured on a four-item, five-point Likert scale and they have been validated and deemed reliable. Composite scores of feasibility and acceptability were estimated and the scores ranged from 4, the lowest score possible, to 20, the highest score possible. This meant that the data were censored, and for this reason, Tobit regression models were fitted to examine factors

influencing health provider's perceived feasibility and acceptability of the guidelines to screen for TB in everyone entering the health facility. This analysis was conducted in STATA 15 and effects were considered statistically significant at $p<0.05$.

Findings: A total of 69 health providers who have ever screened patients for TB symptoms consented to participate in this study, of whom the majority (83%) were females; the median age was 40 years (IQR 34 - 47) and most (62%) were professional nurses. The majority (62%) of the health providers indicated that they were aware of both the IPC guidelines and the TB management guidelines, with 71% having been trained in at least one of the guidelines, however, less than a quarter (20%) of the participants reported to screening patients immediately after arriving at the facility. Overall, the guidelines to screen patients for TB symptoms were perceived as being feasible and acceptable with both scales having a median score of 16 or 80%. Having a postgraduate degree, having positive attitudes towards the guidelines, having ever been trained on at least one of the guidelines and the clinic having at least one of the guidelines available were significant predictors of an increase in acceptability, while having positive attitudes towards the guidelines was the only significant predictor of an increase in perceived feasibility. On the other hand, an increase in age, being female and receiving little or no help from management were significant predictors of a decrease in acceptability of the guidelines, while receiving little to no help was the only significant predictor of a decrease in perceived feasibility of the guidelines.

Conclusion: Screening for TB in every patient who enters the health facility is one of the important strategies to control and eliminate TB. While health providers in this study perceived the guidelines to screen for TB symptoms in all who enter the facility as feasible and acceptable, this still did not translate into routine practice with fidelity as most health providers report to only screening patients at least an hour after arrival. This, therefore, reveals that while feasibility and acceptability may not be significant barriers towards implementing these guidelines, receiving little to no help when one is overwhelmed may indicate the conditions that most health providers are working under, that is high patient loads and short-staffed facilities. Therefore, there is a need to restructure where patients are screened for TB symptoms, provide training to those who screen these patients and also develop strategies that will leverage on the fact that health providers perceived these guidelines as feasible and acceptable to ensure that they routinely practise screening patients for TB immediately after arrival.