



**BUSITEMA
UNIVERSITY**
Pursuing Excellence

**MISSED OPPORTUNITY FOR TUBERCULOSIS IDENTIFICATION AMONG
PATIENTS PRESENTING AT BUBULO HEALTH CENTRE IV AND BUTIRU
HEALTH CENTRE III IN MANAFWA DISTRICT**

BY

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**THIS FINAL YEAR PROJECT REPORT SUBMITTED TO THE
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DECLARATION

I the undersigned, declare that this research is my original work, except where due acknowledgement has been made. I declare that this work has never been submitted to this University or to any other institution for funding/ for partial fulfillment for any award.

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DEDICATION

I dedicate this research to my father, Mr. Masaaba Joseph and my mother, Masaaba Catherine, my dear wife Muduwa Grace, my dear children Thomas, Terry and Tobias, brothers and sisters for all your relentless support to fulfill my dream. Am grateful to the Almighty God for his endless love and the gift of life he has given me to reach this great milestone of my life aspirations.

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ACRONYMS AND ABBREVIATIONS

DHIS2-District Health Information System Version 2

EPTB-Extra Pulmonary Tuberculosis

FY-Financial Year

HC-Health Centre

HCWs-HealthCare Workers

HIV -Human Immunodeficiency Virus

HMIS- Health Management Information System

HSSP-Health Sector Strategic Plan

KAP-Knowledge, Attitudes and Practices

MDR-TB-Multidrug resistant Tuberculosis

NSP- National Strategic Plan

NTP-National TB Control Programme

OPD- Out-Patient Department

PBC-Pulmonary Bacteriologically Confirmed

PLHIV-People Living with HIV

TB-Tuberculosis

WHO-World Health Organization

XDR-TB-Extensive Drug Resistant Tuberculosis

OPERATIONAL DEFINITIONS

Age: defined as age of participants at their last birthday

Educational level: referred to a formal current academic level of the participants

Employment status: is the state of being either in a formal or informal income generating activity.

Gender: referred to sex as reported by the participants.

Health facility: is any location where health care is provided.

Marital status: is the state of being married or not as defined by the customary laws of the participants

Missed opportunity: is when a patient presents with symptoms suggestive of TB but not screened for TB with no evidence of documentation from both the facility TB presumptive register and patients book at the point of exit.

Passive case-finding: involve an element of systematic screening if the identification of people with suspected TB is done systematically for all people seeking care in a health facility or clinic.

Patient waiting time: was the amount of time in hours spent by the patient from time of arrival before being screened for TB.

Presumptive TB patient: is the presence of any or combination of the following symptoms; cough for ≥ 2 weeks or current cough if high risk, fever, night sweats, history of contact with TB case, weight loss, or poor weight gain for children.

TB screening: is the identification of people with signs and symptoms suggestive of TB using an intensified TB case finding form by the health worker.

Tuberculosis TB: is an infectious disease caused by the bacillus *Mycobacterium tuberculosis*. It typically affects the lungs (pulmonary TB) but can also affect other sites (extra pulmonary TB) (WHO, 2017).

ABSTRACT

Background: Missed Tuberculosis (TB) screening opportunities are key drivers for continued Tuberculosis transmission. Although Uganda national TB guideline recommend universal TB screening of all individuals presenting to health facilities, TB screening continue to be missed with (45-50%) of the incident TB cases missed annually. The study was carried out at Bubulo health centre IV and Butiru health centre III to determine the proportion of, and factors associated with missing TB screening, and explore facilitators and barriers associated with TB screening among health workers in Manafwa district in order to inform future TB prevention and control efforts in Uganda.

Materials and Methods: This was a facility based, mixed-method, cross-sectional study. For quantitative component, systematic random sampling was employed, an exit patient interview was used to collect data electronically using Kobo-Collect tool. STATA version 15 was used to analyze quantitative data, univariate data was summarized in tables in form of frequencies, percentages and totals. Clustering at study facility level was factored in at both bivariate and multivariate analysis using a Binary logistic regression model to test for study hypothesizes at 95% confidence interval. For the qualitative component, participants were purposively selected; data were collected with the use of a key informant interview guide using an audio recorder. Transcription in form of text was done and data imported into Nvivo version 12 software for organizing, coding and themes generation. Both deductive and inductive approaches were used to analyze qualitative data. Ethical approval was sought from Mbale Regional Referral Hospital Research Ethics Committee (REC) before data collection.

Results: A total of 125 patients were enrolled into the study from the two health facilities and the response rate was 100%. Of the 125 participants enrolled into the study, 68% (n=85) missed TB screening. The factors associated with missing TB Screening were; awareness about TB symptoms (adjusted Odds Ratio [AOR] 6.81; 95% Confidence Interval [95%CI]: 6.60-7.02) and study site (AOR 67.57; 95% CI: 30.99-147.33). The major facilitators for TB screening included; adequate and dedicated health work force and TB training, availability of TB screening tools and guidelines and availability of adequate medical supplies. Understaffing and absenteeism,

inadequate knowledge of health workers, fear and stigma among health workers, long waiting time and inadequate medical supplies were the major barriers to TB screening.

Conclusion: There was a big proportion of patients who missed TB screening at the two study. Limited awareness about TB symptoms among patients and study site was significantly associated with missing TB screening. It was also noted that well trained health workforce, availability of TB screening resources and medical supplies were among the major facilitators for TB screening while human resource and health facility related factors were among the barriers that affect TB screening.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

The key driver of Tuberculosis transmission is the significant number of missed TB opportunities, these contributes to delays in early diagnosis and treatment (Kweza et al., 2016). One of the key components of the World Health Organization (WHO) End TB Strategy is ensuring early identification of tuberculosis (TB) cases (Uplekar et al., 2016). Early screening, diagnosis and treatment of individuals with infectious tuberculosis (TB) is critical to interrupting transmission and reducing incidence of TB morbidity and mortality (Kweza et al., 2018). Tuberculosis is a chronic infectious disease that affects over 10 million people annually worldwide, with an estimated four million tuberculosis patients remaining undiagnosed/ missed each year (Fa et al., 2017). Interventions to find these missed opportunities is critical for effective TB control globally.

Despite global progress, 40% of TB cases in Africa go un-detected, with a critical gap in TB detection among 15 to 44 years old males (WHO, 2014). The large percentage of TB missed opportunities results from a combination of under-diagnosis, low operational capacity of laboratory networks, weak TB screening strategies in target groups and low involvement of all healthcare workers in TB case finding. Pointing the critical need to improve TB screening (Global Fund, 2018).

While in the past two decades, concerted efforts under the directly observed therapy (DOTS) strategy and later Stop TB strategy made remarkable worldwide progress in controlling TB and caring for patients with TB; millions of people globally with active TB continue to be missed, resulting into continued transmission of TB to others people in the communities contributing to persistent increase in TB deaths and incidence. As a result World Health Organization has called upon all her member states to double efforts towards early identification and treatment of all active TB cases as guided in the WHO's End TB Strategy approved by World Head Assembly (WHA) in 2014 (WHO, 2015).

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