INFLUENCE OF MOTIVATION ON WILLINGNESS OF HEALTH WORKERS IN PROVIDING TUBERCULOSIS SERVICES: A CASE OF TUNDUMA TOWN COUNCIL IN TANZANIA

MALNESTE JAMES

A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF PROJECT MANAGEMENT (MPM)

DEPARTMENT OF PROJECT MANAGEMENT

OF THE UNIVERSTY OF TANZANIA

2023

CERTIFICATION

The undersigned certifies that he has read and here by recommends for acceptance by the Open University of Tanzania a dissertation entitled; "**Influence of Motivation on Willingness of Health Workers in Providing Tuberculosis Services: A case of Tunduma Town Council in Tanzania"** in partial fulfillment of the requirements for the award of Degree of Master of Project Management (MPM)

…….…….

Dr. Nasra Kara

(Supervisor)

05th October, 2023

……..

Date

COPYRIGHT

DECLARATION

I, **Malneste James,** declare that, the work presented in this report is original. It has never been presented to any other University or Institution. Where other people's works have been used, references have been provided. It is in this regard that I declare this work as originally mine. It is hereby presented in partial fulfilment of the requirement for the Degree in Master of Project Management.

…….

Signature

04th October, 2023

……..

Date

DEDICATION

This dissertation is dedicated to all TB, Ex TB patients and their families residing in Tunduma TC in Songwe region, Tanzania.

ACKNOWLEGEMENTS

This research work would not be complete without the grace of the Almighty God, to him let be glory and honor. I extend special gratitude to my mom and the whole family for their support during the hard time I had while working to make this work complete in the absence of the late beloved father.

I am very grateful to my supervisor Dr Nasra Kara for her supervision, directives, guidance and support that made this work successful. I am thankful to the Health Care Workers of all health facilities and authorities found in Tunduma TC in Songwe region who were able to support me during data collection.

I am finally thankful to my reviewers and colleagues for their support and encouragement

ABSTRACT

Although several measures were done by the government to control the spread of this disease, but this disease is still reported to increase the number of death cases in the country. This study examined the influence of motivation on willingness of health workers in providing TB services at Tunduma Town Council. The study specifically addressed; the influence of working condition on willingness of health workers in providing TB services; the contribution of developed skills on willingness of health workers in providing TB services; and the influence of adequate staff on willingness of health workers in providing TB services. A total of 90 structured questionnaires were distributed to health workers using simple random sampling. Data for the study was analyzed using multiple linear regression analysis. The study found that working condition has significant influence on willingness of health workers to provide TB services. The findings also indicated that developed skills are statistically and significantly influencing willingness of health workers to provide TB services. Lastly, the findings indicated that adequate staff has significant influence on willingness of health workers to provide TB services. This implies that the government through the Ministry of Health should increase the level of willingness of health workers on providing TB services by improving working condition, improving developed skills among health workers, and considering the availability adequate staff on working place.

Keywords: *Motivation, Health workers, Tunduma Town Council, Tuberculosis.*

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS AND ACRONYMS

CHWs	Community Health Workers
DC	District Council
HR	Human Resource
KMO	Kaiser-Meyer-Olkin
MDR-TB	Multidrug Resistant Tuberculosis
SSA	Sub-Saharan Africa
TB	Tuberculosis
TB-PMDT	TB Pragmatic Management of Drug Resistant
TC	Town Council
VIF	Variance Inflation Factor
WHO	World Health Organization

CHAPTER ONE

BACKGROUND OF THE STUDY

1.1 Chapter Overview

This section covers the introduction of the key concepts of the topic under study. In this case, the chapter introduces issues related to influence of motivation on willingness of health workers in providing tuberculosis services. Furthermore, this chapter will briefly explain the statement of the problem, research objectives, research questions as well as significance of the study. Moreover, in the end, this section will provide a brief summary of the whole chapter.

1.2 Background of Information

Globally, motivation is seen as the determinant of the behavior characterized by individuals' factors for attaining a certain goal (Borghi et al., 2022). As according to Bozzani(2021), the world health organization (WHO) has set ambitious global targets towards Tuberculosis (TB) elimination. However, the issue of motivation still matters, as in most countries worldwide the incidence rates of TB increased, an effective TB control has been hampered by poor motivation to healthcare workers who serve for TB services at health facilities (Bozzani, 2021).

In addition, Muthuri et al., (2020) states that at the global level, the poor motivation is associated with weak health systems, poverty, and sub-optimal technologies to address the challenges of TB service provision. However, health workers motivation in the hospital context is predicted by an interaction of interpersonal and organizational processes that are shaped by external and internal influencers, which influence power in their bid to influence the organizational outcomes (Ako, 2020).

In case of Africa, the high burden of TB is found African regions, and approximately 80% of TB of TB cases in Sub-Saharan Africa (SSA) are co-infected with HIV (Majigo et al., 2020). Moreover, amongst the leading causing of increased number of TB cases is the patient's enthusiasm and knowledge, financial incompetence, degree of shiftiness of services of services providers and inaccuracy of diagnostic services (Mwaipopo and Lema, 2020). Furthermore, Ngadaya et al., (2020) writes that passive case in TB services depends on healthcare workers motivation and knowledge, financial capability, and degree of suspiciousness of health workers.

Likely to other countries in the World, in Tanzania health workers motivation is also seen as potential key element that can affect the healthcare services delivery (Mbilinyi et al., 2021). According to Rolfe et al., (2020) absence of motivation makes low morale among workforce and undermines the quality of service provision, it also drives health workers away from the professions. In this case, due to low motivation of health workers who provide TB services, Tanzania is found to rank in fourteenth (14^{th}) among high-burden TB countries in the world, with prevalence of TB reported at 337 per 100,000 individuals (Marko, 2020).

Additionally, in the period of 2015 to 2020, the TB incidence has fallen from 306 per 100,000 in 2015 to 222 per 100,000 in 2020. This indicates the reduction of 27% of TB incidence rate. However, a total of 85,597 cases of all forms of TB were notified in 2020, which is an increase of 4.2% or 3,432 cases compared to the year 2019 were 82,166 cases of TB were notified (National Tuberculosis and Leprosy Programme-NTLP, 2022). Furthermore, the study conducted by World Health Organization (WHO, 2018) indicates that recognition rate is less than 50% in Tanzania. However,

global governments and development partners are continually funding, and national projects are working, to end the TB disease in Tanzania (Majigo et al., 2020). Moreover, scholars Teo et al., (2022) also suggest that national TB program should further invest in human resources for TB. This could be done by focusing on staff capacity building and providing staff motivation.

In fact, this study is of importance because it highlights the influence of motivated staff in particular the health workers on TB services provision. As it has been evidenced by scholars (Borghi et al., 2022; Bozzani, 2021; Muthuri et al., 2020; Mwaipopo and Lema, 2020; Rolfe et al., 2018; Teo et al., 2022) that programs for ending TB disease in Tanzania can be successfully implemented with positive influence by providing staff capacity building and staff motivation. Therefore, this study intended to investigate the influence of motivation on health workers providing TB services in Tunduma Town Council in Tanzania.

1.3 Statement of the Problem

TB remains a major cause of morbidity and mortality in Tanzania. For example, according to Lyakurwa et al., (2021), the prevalence rate of Multidrug Resistant Tuberculosis (MDR-TB) in Tanzania is estimated to be 1.0% among new TB patients and 4.1% among retreatment patients in the year of 2017. Moreover, statistics indicate that the country is one of the top 30 countries with high TB burden in the world (Mwaipopo and Lema, 2020). Moreover, the country has initiated the TB Pragmatic Management of Drug Resistant (TB-PMDT) by applying a centralized strategy whereby all patients were managed at one national site called Kibong'oto Infectious Disease Hospital (KIDH).

In fact, the employed strategy was intended to provide Drug Resistance TB (DR-TB) treatment on an ambulatory basis utilizing community-based providers so as to reduce hospital admissions for DR-TB patients. This means, in order to implement this strategy effectively, the decentralization of DR-TB services was done, whereas competency-based training and mentoring package were provided to healthcare workers to motivate them for service provision (Mwaipopo & Lema, 2020).

Despite the employed approach of motivating health workers for TB service provision, TB disease still ranks in third amongst the causes of mortality in Tanzania, after Malaria and HIV/AIDS (Ntinginya, 2020). Additionally, studies such as (Bhatnagar, 2020; Franco et al., 2021; Leshabari et al., 2020; Sato et al., 2020; Weldegebriel et al., 2019) in other burden countries in Africa and Asia indicate decentralized approach is more acceptable success rates in TB services provision. However, the influence of motivation on health workers providing TB services is understudied; in addition, it has been difficult to measure desires of health workers in terms of working condition, developed skills and adequate staff that influence them in TB service provision.

1.4 General Research Objective

The main objective of this study was to investigate the influence of motivation on willingness of health workers in providing TB services in Tunduma Town council.

1.4.1 Specific Research Objectives

i. To determine the influence of working condition on willingness of health workers in providing TB services in Tunduma Town Council

ii. To examine the contribution of developed skills on willingness of health workers in providing TB services in Tunduma Town Council
iii. To determine the influence of adequate staff on willingness of health workers in providing TB services in Tunduma Town Council

1.5 Research Questions

i. What is the influence of working condition on willingness of health workers in providing TB services in Tunduma Town Council?
ii. What is the contribution of developed skills on willingness of health workers in providing TB services in Tunduma Town Council?
iii. What is the influence of adequate staff on willingness of health workers in providing TB services in Tunduma Town Council?

1.6 Significance of the Study

This study is of significance to the government of Tanzania because it highlights the key factors for motivation among the healthcare workers who provide TB services in the country. Moreover, the obtained findings are useful in strengthening motivation to health workers in both public and private health facilities. In addition, the study recommends for the proper methods to be applied by the government on monitoring health sector policies and programs so as to enable people to obtain quality TB services. The healthcare workers' desires will be identified clearly which later may be used by the local government authorities to motivate them.

Finally, the study is important to other researchers who need to conduct studies on a similar topic of motivation and its influence to service delivery in particular in health

sector. In fact, this study is helpful to other researchers, as it will offer them about materials and methodological technics in all parts of their researches.

1.7 Study Area

This study was conducted in Tunduma Town Council in Momba District Council (DC) in Songwe region in Tanzania. Tunduma Town Council had been selected because it is the high densely populated area in Songwe region where the border between two countries of Tanzania and Zambia is located. The statistics indicate that Tunduma Town Council had a population density of 232.8 persons per square kilometer in 2012, this is higher than the national average of 51 persons per square kilometer (National Bureau of Statistic and Regional Commissioner's Office Songwe, 2016). In case of TB disease in Songwe region where Tunduma Town Council is found, the infection rate of TB patients has been estimated to 50.5%, which is also above the national average of 36% in 2017 (THIS, 2017). Therefore, it was the right area where the influence of motivating healthcare workers on provision of healthcare service could be easily determined because the highest population density is one of the risk factors for TB.

1.8 Chapter Summary

This chapter introduces the background of the study. The chapter also covers the statement of the problem, general and specific research objectives, research questions as well as significance of the study and study area. Additionally, chapter two covers concept definitions. The chapter also covers theoretical as well as empirical literature that guides this study. Additionally, this chapter also provides a clear research gap and conceptual framework guiding this study. In the end, a brief

chapter summary is provided.

Chapter three covers research strategies, research philosophy, and study population, sample size, sampling strategies, scope of the study, variables and measurement procedures, data collection methods as well as data analysis methods for this study. It also covers data cleaning process, ethical consideration and limitations and areas for further studies. Chapter four highlights the results and discussion while chapter five gives details concerning summary, conclusions and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Overview

This section covers the definition of key terms, theoretical and empirical literature. In the theoretical literature review the chapter presents the theory guiding the current study and justification for choosing selection theory. However, in empirical literature the chapter describes different studies based on objectives of the current study. Furthermore, this chapter also provides a knowledge gap and conceptual framework for a study.

2.2 Concept Definitions

2.2.1 Definition of Motivation

According to Mischa, et al., (2020) motivation can be explained as an individuals' degree of willingness to exert and maintain effort towards organization goals. Additionally, ensuring that health workers are motivated is very essential in performance, retention, and well-being. Motivation is described as willingness to exert and maintain effort to attain organizations' themes. Simply, motivation can also be stated as workers' satisfaction with their work (Gottert et al., 2021). This study. This study adopted definition elaborated by (Gottert et al., 2021) as it links motivation to willingness.

2.2.2 Definition of Willingness of Healthcare Workers

The scholars have conceptualized the matter of willingness of healthcare workers as the situation of feeling better and continuing to work, continuing to care patients, and the ability of health worker to strive to overcome various difficulties (Chen, et al.,

2022). In addition, willingness of health workers can be explained as the context-specific and corresponds to the nature, magnitude, and threats posed by a particular health disaster (Ashenafi, et al., 2021). Therefore, this study adopted the (Chen, et al., 2022) definition because it explains willingness as a situation of feeling better and continuing to work and caring patients.

2.2.3 Definition of Tuberculosis

Tuberculosis (TB) refers to an airborne disease caused by the bacterium *Mycobabacterium tuberculosis (M.tuberculosis).* In addition, M. tuberculosis and seven very closely related mycobacterial species (*M. bovis, M. africanum, M. microti, M. caprae, M. pinnipedii, M. canetti and M. mungi*) together comprise what is known as the M. tuberculosis complex. Most, but not all, of these species have been found to cause disease in humans (Giovanni et al., 2021). This study adopted the definition described by (Giovanni et al., 2021) as Tuberculosis is an airborne disease.

2.3 Theoretical Literature Review

2.3.1 Maslow Hierarchy of Needs

According to Emmanuel (2015) the Maslow's Hierarchy of Needs Theory is amongst the theories of motivation which show the human needs as arranged in five hierarchical needs. The theory was developed by Maslow who came with a reason that human beings have an internal need which is forcing them towards self-actualization and personal superiority. Then, Maslow conceptualized that there are five different levels of needs, and once one satisfies a need at one stage or level of the hierarchical it has an effect on our behavior. Moreover, at that point human

behavior tends to diminish; one now puts forth a more powerful influence on our behavior for he needs for the next level up hierarchy. Maslow also identified the needs such as psychological needs, security needs, social needs, self-esteem, and self-actualization needs (Liu et al., 2022).

The diagram in Figure 2.1 indicates that most of the fundamental of people are motivated by physiological needs. The theory introduces a concept that, the psychological needs lead to basic needs for survival and this may comprise food, warmth, clothing and shelter. When individuals get hungry, do not have shelter or clothing, they always become motivated to fulfill these basic needs because the identified needs become the major factors for their behavior. In different perspective, when individuals or people do not obtain a deficiency in those identified needs, their needs tend to be forwarded to the second level where it is equally seen by Maslow as the higher order needs (Emmanuel, 2015).

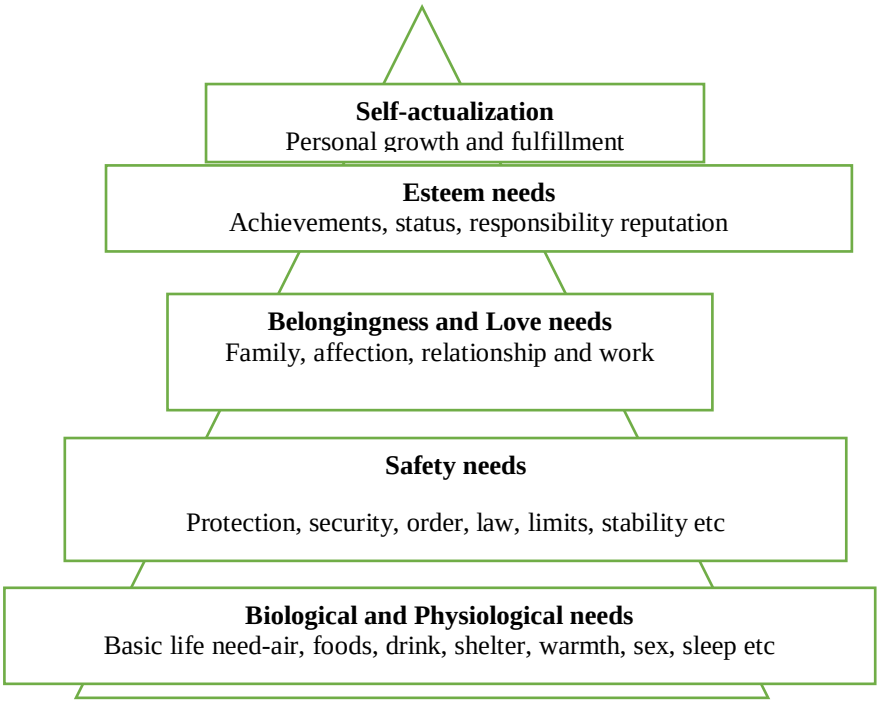

Figure 2.1: Maslow's Hierarchy of Needs

2.3.2 Strengths of Maslow Hierarchy of Needs

According to Rao (2022) the strengths of Maslow's Hierarchy of Needs Theory is that the theory is very simple to understand. Individuals are able to emphasize the theory easily. For instance, the low-skilled workers are able to be motivated to achieve basic needs such as food, shelter, and being safe. While the top management workers are mostly able to achieve the self-actualization ladder to attain their goals. Moreover, the weakness of the theory is that the theory has ignored human different cultural and social backgrounds and priorities that can differ from person to person.

2.3.3 Justification for Choosing a Selected Theory

The Maslow's Hierarch Needs Theory has been selected in this study because it highlights about the motivational factors as needs of employees. Moreover, the theory has provided some variables to consider in the current study. The variables like self-actualization, relationship, and safety needs can be used to determine the influence of working condition, developed skills, and adequate staff on motivating healthcare workers. Maslow has managed to show that motivation is very important to push employees to perform.

Also, he was able to inform us that each individual can be motivated differently by different things. On top of that there will be those who are willing to perform after being given physiological need but there will be those who will climb the ladder so that they can reach the self-actualization stage. Moreover, the Maslow's Hierarch Needs Theory has been employed by different scholars in studies based on motivational factors. For example, Emmanuel(2015) applied this theory on a study for assessing the influence of motivation on the work performance of nurse at the

Amasaman municipal hospital in Ghana. In addition, Leonard(2021) used a Maslow's theory to evaluate motivation of public health workers for effective work performance, a case of university teaching hospital in Zambia.

2.4 Empirical Literature

2.4.1 Working Condition on Health Service Provision

Studies have been done on the area of working condition in healthcare service provision. For example, Manyisa and Aswegen, (2021) conducted a study on factors affecting working conditions in public hospitals. The key findings in the study included workload, HIV/AIDS epidemic, shift work, long working hours, poor infrastructure, inadequate resources and shortage of staffs as main factors attributed to poor working conditions. Moreover, in his study on working danger zone in Taiwan, Shu-Ling (2020) argues that healthcare providers work in poor working conditions which also include shortage of nursing staff, complexity of patient care, continued worries about being infected, and sensitivity to self-protection.

Furthermore, another study by Bhaga, (2020) that aimed at determining the influence of working conditions on the productivity of the nursing staff in midwife and obstetrical unit in Pretoria West Hospital indicates that majority of the nursing staff midwife and obstetrical unit of Pretoria West Hospital perceive their working conditions as being stressful. The author argues that the working conditions are negatively influencing on their well-being and performance.

Besides, a study of Manyisa and Aswegen, (2021) examined factors affecting working conditions in public hospitals, moreover Bhaga, (2020) also determined the

influence of working condition on the productivity of the nursing staff in midwife. However, this study went beyond as it provides a link between willingness of health care providers and working condition, moreover this study shows working condition as a motivation factor for willingness, however the mentioned studies do not involve willingness as a product of working condition.

2.4.2 Developed Skills for Quality Health Provision

Juma (2018) who conducted a study on the effect of service delivery factors on timely initiation of Tuberculosis Treatment within primary settings in Uganda. Specifically, the study was done qualitatively and explored the influence of developed skills on job performance in health facilities. Furthermore, the key findings of the study show that skills make healthcare providers to improve performance. Moreover, the study also highlights the type of skills which include technologies, good leadership, and good health management.

On the other hand, the study by Zou, et al., (2022) with a title a title ‘you say you are a TB doctor, but actually, you do not have any power’ health worker demotivation in the context of integrated, hospital-based tuberculosis care in eastern China, found that healthcare providers perceived their professional skills to be low due to lack of programs of developing their skills, limited opportunities for skills development, and social stigma surrounding TB services.

Moreover, Namakula, et al., (2021) in their study on health worker incentive policies during and after the conflict in Northern Uganda which was done by reviewing different documents, argue that workers always tend to be efficient as possible by

improving upon their skills and knowledge so that they are able for the progress of the organization. As it is clearly known that to some extent when workers are being motivated, their ability to deliver services to people whom they serve will be high. This means, workers who have been imparted with skills are always being motivated as per their hard needs which are related to the nature of their duties.

Furthermore, the reviewed documents (Juma, 20218; Namakula et al., 2021; Zou et al., 2022) have highlighted developed skills for willingness of health care workers. However, these reviewed studies have been done in different locations from Tanzania, this creates a gap, as the outcome cannot be similar to all places, and therefore the current study has been done specifically in our location of Tanzania.

2.4.3 Adequate Staff for Quality Health Provision

Bulage et al., (2020) conducted a study on the quality of Tuberculosis service in health care centers in a rural district in Uganda. In their study, the authors look on the providers and clients' perspective. Then, after analysis, key findings indicate that most of healthcare workers are motivated to work and delivering quality services when they are adequate in number. The results also show that adequate number of staff reduces workload and later it improves work outcome in any institution.

Kigozi, et al., (2020) conducted a study on community health worker motivation to perform systematic household contact tuberculosis investigation in a high burden metropolitan district in South Africa. After analysis, their study found that in South Africa there is a chronic shortage of professional health workers, therefore, in order to motivate the professional health workers to deliver systematic household contact

tuberculosis (TB), the government has decided to employ the Community Health Workers (CHWs). Additionally, motivation was determined through intrinsic job satisfaction, burnout and team commitment.

Another study was done by Leonard (2021) on evaluation of motivation of public health workers for effective performance. The findings from the study found that most of the health workers are always being motivated when a large number of health workers are trained to deliver quality health services. On the other hand, (Anampiu, 2020) did a study on motivational factors in service delivery at sub-county hospital in Meru, Kenya. Moreover, the findings indicate that there was a positive significant relationship between number of staff and motivation factors for quality service delivery among the participated health care workers. As it was stated that adequate number of professional staff facilitates management practices and drugs procurement which are all essential in quality service delivery.

The studies (Bulage et al., 2020; Kigozi et al., 2020; Leonard, 2021) have been done on the context of Uganda, South Africa, and Kenya, therefore further studies on Tanzania was needed to examine the influence of adequate staff for willingness of health care workers. Therefore, this study examined the influence of adequate staff on willingness of health care workers to provide TB services.

2.4.4 Willingness of to Provide Service/Work

Yohanes (2018) conducted a study on the effect of motivation on employees' performance in public sector. The study employed a descriptive and explanatory research design. Moreover, after analysis, the author found that motivation is a

building factor for employees' willingness to work which makes them to add efforts in working, throwing themselves into service provision, and feeling exited when providing services. Raza, et al., (2020) did a study on the role of employee willingness to perform between career choice and employee effectiveness. Regression analysis was used to analyze the results. After analysis the authors found that employee willingness is a predictor of employee happiness. As the results indicated that employee willingness has a positive and significant effect on employee happiness.

Table 2.1: Summary of the Previous Related Studies

S/N	Authors' Name & Year	Aim of The Study	Variables Examined	Data Analysis Methods Used	Main Findings
1	Manyisa And Aswegen, (2021)	Factors Affecting Working Conditions in Public Hospitals	Working Conditions	Thematic Analysis	Shift Work, Long Working Hours, Poor Infrastructure, Inadequate Resources and Shortage Of Staff
2	Shu-Ling, (2020)	Exploring Taiwanese Nurse's Work Conditions in Negative Pressure Isolation Ward	Working Conditions	Content Analysis	Shortage of Nursing Staff, Complexity of Patient Care, Continued Worries About Being Infected, And Sensitivity to Self-Protection
3	Bhaga, (2020)	Influence of Working Conditions on The Productivity of The Nursing Staff in Midwife and Obstetrical Unit in Pretoria West Hospital	Working Conditions	Descriptive & Content Analysis	Working Conditions Are Negatively Infuencing on Their Well-Being and Job Performance
4	Juma (2018)	Effect of Service Delivery Factors on Timely Initiation of Tuberculosis Treatment Within Primary Settings in Uganda	Developed Skills	Content Analysis	Improved Technologies, Good Leadership, And Good Health Management System
5	Zou Et Al., (2022)	'You Say You Are a Tb Doctor, But Actually, You Do Not Have Any Power' Health	Developed Skills	Thematic Analysis	Lack of Programs of Developing Their Skills, Limited Opportunities for Skills Development,

S/N	Authors' Name & Year	Aim of The Study	Variables Examined	Data Analysis Methods Used	Main Findings
		Worker Demotivation in The Context of Integrated, Hospital-Based Tuberculosis Care in Eastern China			And Social Stigma Surrounding Tb
6	Bulage Et Al., (2020)	The Quality of Tuberculosis Service in Health Care Centers in A Rural District in Uganda	Adequate Staff	Thematic Analysis by Epi Info	Most of The Health Care Workers Are Motivated to Work and Delivering Quality Services When They Are in Adequate Number
7	Kigozi Et Al., (2020)	Community Health Worker Motivation to Perform Systematic Household Contact Tuberculosis Investigation in A High Burden Metropolitan District in South Africa	Adequate Staff	Exploratory Factor Analysis	There Is A Chronic Shortage of Professional Health Workers
8	Anampiu (2020)	Motivational Factors in Service Delivery at Sub-County Hospital in Meru, Kenya	Adequate Staff	Correlation & Multi Linear Regression	There Was A Positive Significant Relationship Between Number of Staff and Motivation Factors for Quality Service Delivery Among the Participated Health Care Workers

2.5 Research Gap

2.5.1 Empirical Gap

There is a lack of a consensus on influence of motivation on willingness of health workers in providing Tuberculosis services. For example, based on reviewed theory, there are various scholars who have highlighted determinants of motivation to influence willingness of health workers in services provision. For example, Ford et al., (2017) has highlighted self-actualization as the factor identified in Maslow's hierarch of needs to determine motivation which later influences people to work productively. Moreover, theoretically, other studies have proposed the motivational

factors as all basic needs needed by workers in the organization. For example, (Rao, 2022) makes clears that low-skilled workers are always motivated through provision of basic needs such as food, shelter, and being safe all the time. In this view, scholars have highlighted theoretically the motivational factors for willingness to work generally; therefore, there is a need to conduct this study which is very specific to health workers who work in providing TB services.

Furthermore, theoretically, apart from basic needs as motivational factors for willingness to work, scholars have identified other factors. For example, Manyisa and Aswegen (2021) states that willingness to work in health facilities can be affected by factors such as workload, HIV/AIDS epidemic, shift work, and long working hours. Similarly, Zou et al., (2022) highlights factors such as technologies, leadership, and good health management. However, scholars like Bulage et al., (2020) and Kigozi et al., (2020) in their studies found factors like adequate number of staff and a chronic shortage of professional staff. In this empirical review, each study has identified its own different factors; therefore, there is a need to conduct this study to identify the actual motivational factors in the study area which can either be similar or different to what have been identified theoretically.

2.5.2 Contextual Gap

Most of the reviewed researches have little coverage on contextualized gap on influence of motivation on willingness of health workers for Tanzania. Most of these studies had been done in different countries. For example, Shu-Ling (2020) in Taiwan, Bhaga (2020) in South Africa, Juma (2018) in Uganda, Anampiu (2020) to mention a few. This means, in Tanzania context, there are little studies that have

been done based on the influence of motivation on willingness of health workers. Therefore, there is a need of studying the influence of motivation on willingness of health workers in providing Tuberculosis services in Tanzania.

2.6 Conceptual Framework

The conceptual framework in Figure 2.2 indicates that the influence of motivation on willingness of health workers in providing TB services (dependent variable) is influenced by motivation which is measured in three dependent variables which include; working conditions, developed skills, and adequate staff.

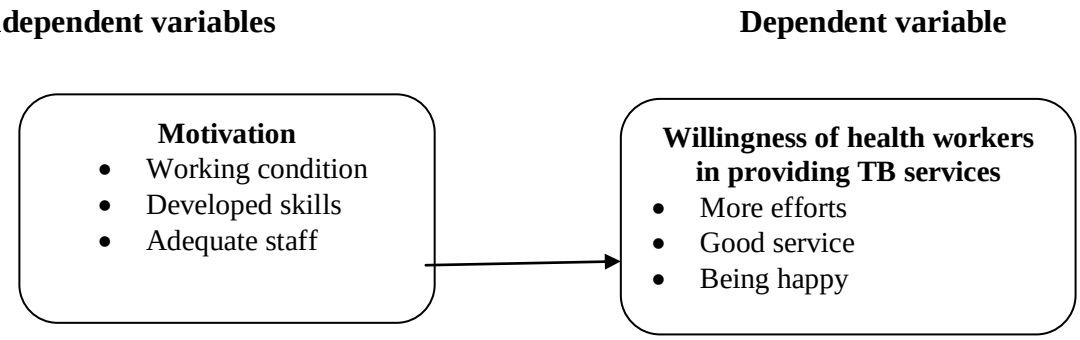

Figure 2.1: Conceptual Framework
Source: Constructed by the researcher (2022).

2.7 Chapter Summary

This chapter comprises of definitions key terms, theoretical literature review, and empirical literature review. In the theoretical literature one theory known Maslows's Hierarchy of Needs Theory has been described. In the empirical literature review, the three variables which guide this study have been narrated, these include; working conditions, developed skills, and adequate staff. Finally, the chapter is also organized to provide the conceptual framework.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Overview

This chapter describes the methods of conducting a research on the basis of what, how, when, and why. Therefore, the chapter shows what philosophy was used, how it was applied and for what reasons. Different from a applied philosophy, this chapter also elaborates all components of different methods which were employed from a stage of study design and data collection to the stage of data analysis and interpretation of findings. In this case, the chapter gives detailed information on; research approach, research design strategy, area of study, population, sample and sampling techniques, data collection, data analysis, data cleaning, validity and reliability, and ethical consideration.

3.2 Research Approach

This study employed a cross-sectional research design, in which according to (Bryman and Bell (2011) the cross-sectional research design is also known as social survey design. In reflection to the cross-sectional design, in this study data were collected at once. This kind of research design was employed because it always saves time and funds during data collection; this means a researcher could be able to collect data of many variables for not more than one period of time. In addition, the study employed a quantitative approach in data collection.

The main reason for using a quantitative approach is to obtain data in numeric form which can easily allow developing a statistical test for relationship between variables. Indeed, this approach emphasizes the transforming of data quantities and

the models of statistics for purposes of measuring and analyzing data. In addition, this approach had been selected in this study because it allows the application of statistical data analysis to obtain information about the study simply because it is based on measuring the quantity or amount. The disadvantage of this approach is a situation of limiting the respondents in providing answers, however it does not affect negatively the study because questions were well developed based on the objectives.

3.3 Research Philosophy

This study applied a research philosophy in particular the positivism. In this philosophy, a research pre-assumes that social reality is external to the people involved Bernie, (2018). Thus, this kind of philosophy was applied to obtain reality of the influence of motivation on health workers providing TB services in Tanzania. In fact, the positivism philosophy was employed to develop interpretation of a single independent variable which might be working condition, developed skills, and adequate staff to provide a link with a single dependent variable which is willingness of health workers to provide TB services.

3.4 Study Population

The target population in this study was the healthcare workers of Tunduma Town council in Momba DC. Moreover, according to HR officer 2022, Tundama Town Council has a total of 116 healthcare workers who work for TB services. In this study the following categories of healthcare workers had been considered in the population.

Table 3.1: Population Distribution

S/N	Category	Population
1.	Medical Practitioners/Clinicians	24
2.	Nurses	36
3	Laboratory personnel	4
4.	Other healthcare providers	52
	Total	**116**

Source: Researcher, (2023).

3.5 Sample Size

The sample size in this study was obtained by using the Yamane's formula of 1967 for calculating sample size as adopted from Adam (2020) who describes about sample size determination in survey research. Therefore, in order to reach to the applicable sample size, the following calculation was done.

Yamane's formula $n = \frac{N}{1 + N\,(e)^2}$

Whereas: n = Sample size

N = Population

e = Probability of error (0.05), assuming 95% confidence level, and with a precision of 5%.

$$= \frac{116}{1 + 116\,(0.05)^2}$$

$$= \frac{116}{1 + 116(0.0025)}$$

$$= \frac{116}{1 + 116(0.0025)}$$

$$= \frac{116}{1 + 0.29}$$

$$= \frac{116}{1.29}$$

n= 90

Thus, a sample size involved a total of 90 healthcare workers. In addition, in each category of population a researcher applies 78% of that population to calculate sample size in that population. In this case, the description of sample size included 19 medical practitioners/clinicians, 28 nurses, 3 laboratory personnel, and 40 other healthcare providers.

Table 3.2: Distribution of the Study Sample

Category	Population	Sample
Medical practitioners/Clinicians	24	19
Nurses	36	28
Laboratory personnel	4	3
Other healthcare providers	52	40
Total	**116**	**90**

Source: Researcher, (2023).

3.6 Sampling Technique

This study employed probability sampling technique to select participants of the study. Probability sampling strategy refers to a technique in which a researcher chooses samples from a large population whereby everyone in a population has a known and equal chance of getting selected (Berndt, 2020). Specifically, simple random sampling in particular a lottery method was applied to obtain 90 healthcare workers in different health facilities in Tunduma Town council. When a researcher reached at the study area, the Human Resource (HR) officer provided with him a list of all healthcare workers who provide TB services, then from the provided list of healthcare workers who provide TB services, a researcher arranged the names of healthcare workers alphabetically and numbering accordingly.

The second step was to write numbers listed in the sampling frame on small pieces of papers and placing them in a jar. The third step was to mix up all papers well and

taking out one of a paper from a jar. The process was repeated until the required number was reached. The main reason for applying simple random sampling was to avoid bias in selecting employees to involve in the study.

3.7 Variables and Measurement Procedures

In this study, all three independent variables (working condition, developed skills, and adequate staff) and one dependent variable (willingness of health workers to provide TB services) were measured by using the Likert Scale. The used Likert Scale consisted of seven options (*1=strongly disagree, 2=slightly disagree, 3=disagree, 4=neither agree nor disagree, 5=agree, slightly agree, and strongly agree*). The reason of applying a Likert Scale was to obtain opinions, attitudes, or behaviours of healthcare workers which allowed the study to easily conceptualize personality traits concerning the topic under study.

3.8 Data Collection Methods

In this study, questionnaire was used to collect information from 90 healthcare workers who provide TB services in Tunduma Town Council. According to Satya (2022) questionnaire is a research tool featuring a series of questions used to collect useful information from respondents. The questionnaire consisted of only closed-ended questions for gathering quantitative information. The reason to involve only the closed-ended questions in a questionnaire was to limit respondents to specific answers in order to obtain information on the magnitude of issues understudy in quantitative manner.

Additionally, questionnaire was self-administered to 90 healthcare workers who were given a specific time to fill and returning them to the research assistant.

However, prior to administering questionnaire to respondents, the researcher provided detailed information about the research. In clarification, the researcher emphasized on the purpose of this research, its significance, and how would benefit them and others. Moreover, the issues of confidentiality and freedom to answer only questions they felt comfortable with, and their right to withdraw from the study at any time without facing any consequences was emphasized.

3.9 Data Analysis Methods

3.9.1 Reliability

Surucu and Maslakci (2020) defined data reliability as a way of measuring consistency of data collected overtime to avoid research errors. The Cronbach's alpha was applied to test reliability consistency of the independent variables. It takes the values from 0 to 1, with one (1) the highest value, meaning perfect consistency. Furthermore, according to Babbie, (2010), a Cronbach's Alpha with value higher than 0.7 is considered as reliable in comparison values lower than 0.7, this means Reliability coefficient of $\alpha \geq 0.7$ is considered acceptable.

3.9.2 Validity

In this study, A Kaiser-Meyer-Olkin (KMO) was used to measure and determine the suitability of data for analysis. The KMO test determines the adequacy and validity of data. The test ensures that the data we have are suitable to run analysis and therefore determine whether or not there is a set out what intended to measure (Surucu and Maslakci, 2020). KMO value of score of 0.5 and above indicating that all variables are highly adequate for analysis.

3.9.3 Descriptive Statistics

In this study, data analysis involved descriptive statistics, specifically frequencies and percentages were involved to generate findings. Finally, data were then be summarized and presented in tables, and graphs of frequencies and percentages to interpretation and discussion.

3.9.4 Multiple Linear Regressions

Additionally, inferential analysis employed a multiple linear regression to establish a statistically significant level between independent variables (working environment, developed skills, and adequate staff) and dependent variable (willingness of health workers in providing TB services). The *p-value*$\leq$0.05 was used to measure the significance level of association between independent variables and dependent variable. Furthermore, data were converted to dummy variables as 0 or 1 (0,1), whereas '0' stands for 'yes' while '1' stands for 'no'.

The Multiple Linear Regression is specified as follows:

$$\mathbf{Y = a + b_1X_1 + b_2X_2 + b_3X_3 \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ b_nX_n}$$

Y = Dependent variable (Willingness of health workers in providing TB services)

X_S = Independent Variables

a = Y intercept, where the regression line crosses the Y axis

b_1 = the partial slope for X_1 on Y

X_1 = Working conditions

X_2 = Developed skills

X_3 = Adequate staff

3.9.5 Assumptions of Multiple Linear Regression Model

The scholars such as (Kothari, 2014; and Saunders et al., 2009) the regression model was determined to hold true if the following assumptions were met in concerning objective.

3.9.5.1 Linearity

Linear regression needs relationship between the independent and dependent variables. If the two variables are not linear, the results of the regression analysis will under-estimate the true relationship (Greene, 2010). Therefore, in this study, linearity was tested and determined by using scatter plots, in which the dependent variable is on the y-axis while independent variables on the x-axis. Moreover, linearity was observed when the graph has a linear distribution observation.

3.9.5.2 Absence of Multicollinearity

Multicollinearity occurs when the independent variables are not independent from each other. Therefore, in this study, multicollinearity was tested by using Variance Inflation Factor (VIF) and the level of Tolerance (Mondal and Mondal, 2018). However, the level of tolerance was set from 0 to 1. The formula for measuring VIF is $VIF=1/(1-R^2)$. Multicollinearity is possible in the model when R>= +-0.9; Where R squared is the coefficient of determination.

3.9.5.3 Homoscedasticity of Variances

The model assumes that the error terms along regression are equal. Slight heteroscedasticity has little effect on significance tests, however when heteroscedasticity is marked it can lead to serious distortion of findings and seriously

weaken the analysis thus increasing the possibility of a type 1 error (Greene, 2010). Therefore, in this study homoscedasticity was checked by using the plots of standardized values predicted by model against the standardized residuals observed. The assumption was met because the plot had a random array of plots (absence of funnel shape).

3.9.5.4 Residuals are Normally Distributed

The assumption highlights that when happens that the residuals are not normally distributed, the confidence interval becomes unpredictable either will give high results or low results, that affects the model performance. Therefore, in this study normally distributed was observed by using P-P plots to show fairly straight relationship of data. It is important to note that, the assumptions hold valid as if the dots lie on a very closer to the diagonal line, that this infers that the residual will be normally distributed.

3.9.5.5 Residuals are Independent

In order for the study to observe if individual data points are independent, the study employed a Durbin Watson statistic. The Durbin Watson values ranges between 0 and 4 (Saunder et al., 2012). The smaller the value, the positive residual correlation. The assumption makes clear that if the Dublin Watson Statistics is closer to 2 there is positive residual autocorrelation, whereas, if the Dublin Watson is greater than 2 there is negative autocorrelation.

3.10 Data Cleaning Process

Quality data checks was an on-going process started at the data gathering stage, data entry and analysis. In data gathering stage, in order to avoid errors and biases when

questionnaire was translated to Kiswahili language, the researcher compared each question in both questionnaires. At the data entry and analysis stage, the researcher at first checked if number of respondents matches to the number of rows in a data set, then the entire column was checked to remove duplicates. Thereafter, the total number of columns in spreadsheet was quickly matched to the total number of questions in a questionnaire. However, the Statistical Package for the Social Sciences (SPSS) program was used for analysis.

3.11 Ethical Consideration

The researcher observed all the research procedures to ensure that ethical matters were adhered by. The Open University reviewed the proposal for ethical issues and for approval before data collection. After that the researcher was given the research clearance letter, and research data collection permit letter. However, the written permission for data collection was also sought from Tunduma Town council in Momba DC. In order to consider ethical issues, the study also involved participants who agreed with consent to indicate their willingness to participate in the study.

3.12 Chapter Summary

This chapter has included research strategies, research philosophy, study population, and sample size. Moreover, the chapter also covers about sampling strategies, scope of the study, variables and measurement procedures. Further, the section has included the data collection methods, data analysis, and data cleaning. In addition, the chapter also covers reliability, validity, ethical consideration, and limitations.

CHAPTER FOUR

RESULTS

4.1 Overview

The main objective of this study was to investigate the influence of motivation on willingness of health workers in providing TB services in Tunduma Town Council. The specific objectives of the study were; to determine the influence of working condition on willingness of health workers in providing TB services; to examine the contribution of developed skills on willingness of health workers in providing TB service; and to determine the influence of adequate staff on willingness of health workers in providing TB services.

Therefore, this chapter gives details concerning the obtained results in respective to objectives and assumptions that guided the whole study. In this case, the chapter comprises of four sections; the first section indicates the findings of 90 participants of the study based on their socio-demographic characteristics. The second section gives the obtained results on the variable working condition. Furthermore, the third section presents findings based on developed skills variable. The fourth section in this chapter presents findings concerning variable of adequate staff. Moreover, lastly the chapter gives results based on willingness of health workers in providing TB services.

4.2 Descriptive Analysis of the Findings

4.2.1 Socio-demographic Characteristics of Respondents

The study comprised of a total of 90 respondents during data collection. Although the questionnaire was self-administered, all respondents filled their questionnaire

properly and returned them to the researcher. Therefore, this part presents results of socio-demographics characteristics of all respondents. However, it is also important to note that the socio-demographic characteristics of the current study included; age, gender, education, marital status, and cadre. Age of the respondents were examined and it was found most of respondents ranged from 35(38.9%) ranged from 36-45 years old, followed by those ranging from 26-35 years old (25.6%). Furthermore, 22(24.4%) ranged from 18-25 years old, and 10(11.1%) were from the age of 46 years old and above.

Additionally, gender wise reported that 56.7% of respondents were males while less than 50.0% were female. The study also found that exactly half (50.0%) of respondents had attended to certificate level of education, followed by 42.2% who had attended to diploma level of education. Furthermore, less than 10.0% had attended to a degree level of education. In addition, marital status indicates that 50.0% of respondents were married, followed by 45.6% who were single. Moreover, less than 10.0% of respondents were separated.

Besides, staff occupation/cadre was also examined and it was found that 41.1% of respondents were working as nurses, followed by those working as other health workers (35.6%). Furthermore, 21.1% were working as medical practitioners, while less than 10.0% of respondents were laboratory personnel. Table 4.1 presents the summary of the socio-demographic characteristics of respondents.

Table 4.1: Socio-Demographic Characteristics of Respondents

Variable	Frequency (n=90)	Percent
Age group of respondents		
18-25 years	22	24.4
26-35 years	23	25.6
36-45 years	35	38.9
46 and above years	10	11.1
Gender/Sex		
Male	51	56.7
Female	39	43.3
Level of Education		
Certificate	45	50.0
Diploma	38	42.2
Degree	7	7.8
Marital Status		
Single	41	45.6
Married	45	50.0
Separated	4	4.4
Staff Occupation/Cadre		
Medical practitioners	19	21.1
Nurses	37	41.1
Laboratory personnel	2	2.2
Other health workers	32	35.6

Source: Field Data, (2023).

4.3 Inferential Analysis

4.3.1 Reliability

In testing Reliability for factor analysis, the Cronbach's Alpha was applied to test reliability consistency of the independent variables. It takes the values from 0 to 1, with one (1) the highest value, meaning perfect consistency. Furthermore, according to Babbie, (2010), a Cronbach's Alpha with value higher than 0.7 is considered as reliable in comparison values lower than 0.7, this means Reliability coefficient of $\alpha \geq 0.7$ is considered acceptable.

In this study, three variables; working condition, developed skills and adequate staff were employed for reliability test. The results show that the first test of working condition had a relatively higher consistency of 0.832, developed skills 0.715, and

adequate staff 0.763. Here, the implication is that the coefficient alpha in all variables were consistency and acceptable (Table 4.1).

Table 4.2: Reliability Test of the Study Variables

Variable	Cronbach's Alpha in item
Working condition	0.832
Developed skills	0.715
Adequate staff	0.763

Source: Field Data, (2023).

4.3.2 Validity Results

For Validity, A Kaiser-Meyer-Olkin (KMO) was used to measure and determine the suitability of data for analysis. The KMO test determines the adequacy and validity of data. The test ensures that the data we have are suitable to run analysis and therefore determine whether or not there is a set out what intended to measure (Surucu and Maslakci, 2020). KMO value of score of 0.5 and above indicating that all variables are highly adequate for analysis.

The results in Table 4.3 indicate that working condition had 0.621 which is higher than 0.5, thus it is considered as excellent result that it exceeds 0.5. The second test based on developed skills shows a score of 0.667 which is also appropriate for a factor analysis. The final test is on adequate staff which shows the score of 0.785 which is also acceptable for the factor analysis.

Table 4.3: KMO Test

Variable	KMO
Working condition	0.621
Developed skills	0.667
Adequate staff	0.785

Source: Field Data, (2023).

4.3.2 Assumption of Multiple Linear Regression Model

4.3.2.1 Linearity

Linear regression needs relationship between the independent and dependent variables. If the two variables are not linear, the results of the regression analysis will under-estimate the true relationship (Greene, 2010). Therefore, in this study, linearity was tested and determined by using scatter plots, in which the dependent variable is on the y-axis while independent variables on the x-axis. Moreover, linearity was observed when the graph has a linear distribution observation. Based on the scatter plot in Figure 4.1, data are distributed in forms of a linear trend line. The linear is formed from the bottom left to the top right. In this case, it is concluded that regression model has fulfilled the linearity assumption.

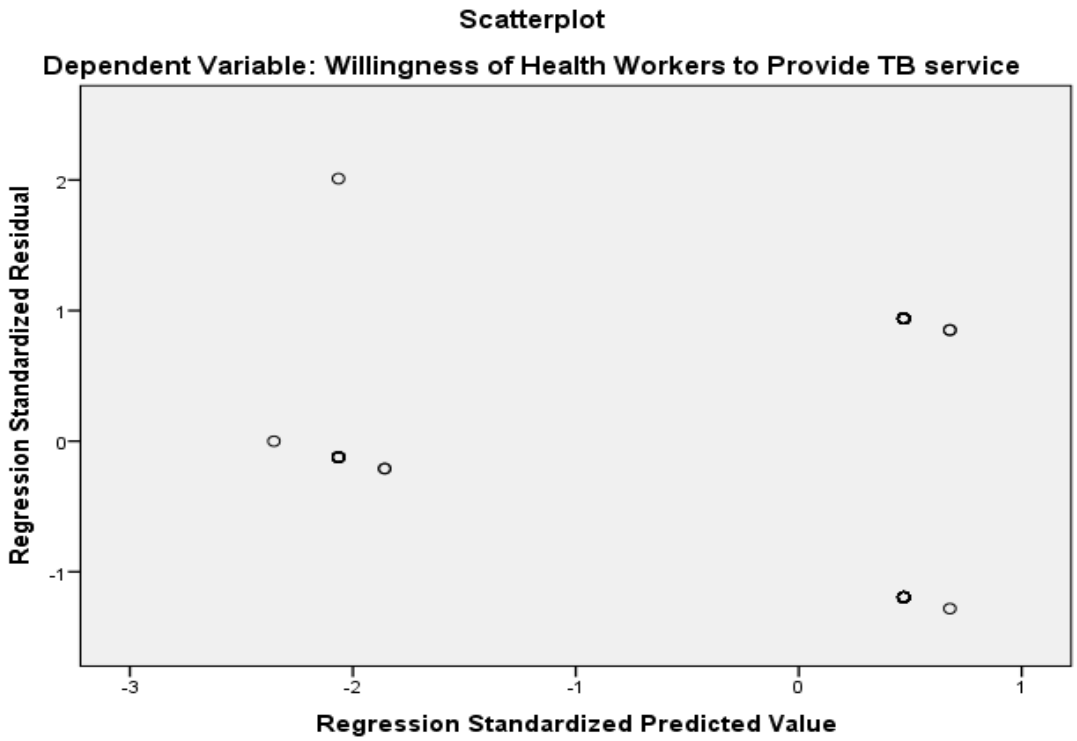

Figure 4.1: Linearity Test

4.3.2.2 Absence of Multicollinearity

Multicollinearity occurs when the independent variables are not independent from each other. Therefore, in this study, multicollinearity was tested by using Variance Inflation Factor (VIF) and the level of Tolerance (Mondal and Mondal, 2018). However, the level of tolerance was set from 0 to 1. The formula for measuring VIF is $VIF=1/(1-R^2)$. Multicollinearity is possible in the model when R>= +-0.9; Where R squared is the coefficient of determination.

Based on the coefficient output in Table 4.4, collinearity statistics obtained VIF value ranging from 1.072 to 1.214, meaning that the VIF values obtained are in between 1 to 10, it can be concluded that there are no multicollinearity symptoms.

Table 4.4: Multicollinearity Test

Model	Collinearity Statistics	
	Tolerance	VIF
Working condition	.826	1.210
Adequate Number of Staff	.823	1.214
Developed skills	.933	1.072

Source: Researcher, (2023).

4.3.2.3 Homoscedasticity of Variances

The model assumes that the error terms along regression are equal. Slight heteroscedasticity has little effect on significance tests, however when heteroscedasticity is marked it can lead to serious distortion of findings and seriously weaken the analysis thus increasing the possibility of a type 1 error (Greene, 2010). Therefore, in this study homoscedasticity was checked by using the plots of standardized values predicted by model against the standardized residuals observed. The assumption was met because the plot had a random array of plots (absence of

funnel shape).

The diagonal dots in Figure 4.2 are speeded up along the diagonal line, indicating that data is linear hence no evidence of outliers. The case residual dots are dispersed in a rectangular shape about zero (0), implying homoscedasticity (equality of variance). As a result, there is no reason to suspect heteroscedasticity (unequal variance in the data).

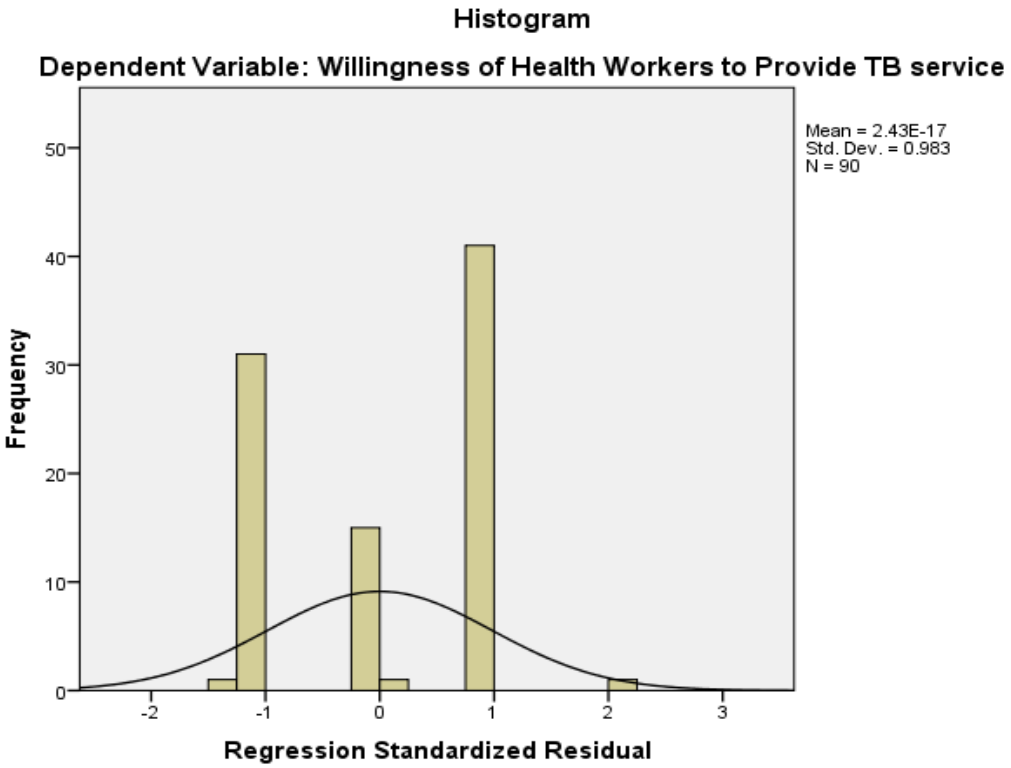

Figure 4.2: Homoscedasticity of Variances Test
Source: Researcher, (2023).

4.3.2.4 Residuals are Normally Distributed

The assumption highlights that when happens that the residuals are not normally distributed, the confidence interval becomes unpredictable either will give high results or low results, that affects the model performance. Therefore, in this study

normally distributed was observed by using P-P plots to show fairly straight relationship of data. It is important to note that, the assumptions holds valid as if the dots lies on a very closer to the diagonal line, that this infers that the residual will be normally distributed (Figure 4.3).

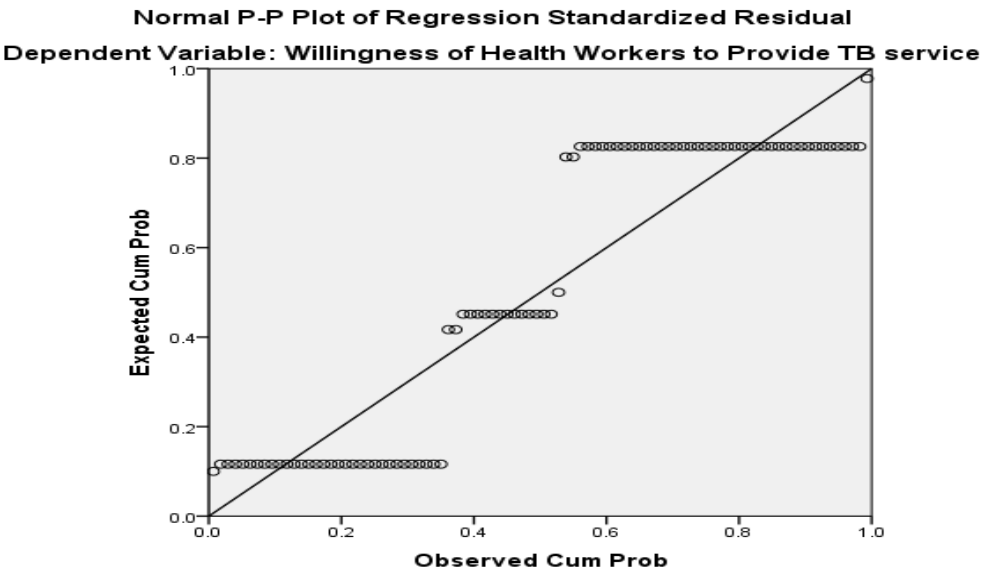

Figure 4.3: Normally Distributed

4.3.2 Multiple Linear Regression Analysis Results

The study employed a multiple linear regression to regress the independent variables (working condition, developed skills, and adequate staff) and dependent variable (willingness of health workers in providing TB services). Before running the linear regression model, all data were converted to dummy variables as 0 or 1 (0,1). The results are described in Table 4.5, 4.6 and 4.7.

4.3.3.1 Model Summary

The multiple linear regression analysis was applied for the intention of estimating the influence of adequate number of staff, developed skills, and working condition (independent variables) on willingness of health workers to provide TB services.

Table 4.5 illustrates a summary of the model in which item interest is R^2 statistics which is 0.533. This encounters that determinants influencing willingness of health workers in providing TB service accounts for 53.3%.

Table 4. 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.730[a]	.533	.513	.52661
a. Predictors: (Constant), Staff, Skills, Condition				
b. Dependent Variable: Willingness				

4.3.3.2 ANOVA Results

Table 4.6 illustrates the analysis of variance (ANOVA) findings. It is also known as model fit results. Of interest in this table are the F-statistics and its associated sig. The findings indicate that F-statistics is 5.305 = 0.002, $p<0.05$. The findings show that model's hypothesis that there are influence that affects willingness of health workers in providing TB service, this means the model has the power to predict willingness of health workers in providing TB services.

Table 4.6: ANOVA Results

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.498	3	1.166	5.305	.002[b]
	Residual	18.902	86	.220		
	Total	22.400	89			
a. Dependent Variable: Willingness						
b. Predictors: (Constant), Staff, Skills, Condition						

4.3.3.3 Regression Analysis Coefficient Results

Table 4.7 presents the findings on the coefficients of the regression model. The coefficients results show the influence of such as adequate number of staff, developed skills, and working condition positively predict willingness of health

workers in providing TB services. The influence of adequate number of staff was found positively, statistically and significantly related to willingness of health workers to provide TB services ($B = .041^{***}$, $p = .041<0.05$). The influence of developed skills was found to be positive, statistically, and significantly related to willingness of health workers to provide TB services ($B = .503^{***}$, $p = .000<0.05$). Working condition was found to be positively, statistically and significantly related to willingness of health workers to provide TB service ($b = .098^{***}$, $p = .030<0.05$). Multicollinearity statistics indicate tolerance figures ranging from 0.823 to 0.933 while Variance Inflation Factors (VIFs) ranged from 1.072 to 1.214. These figures suggest that multicollinearity is not suspected amongst the independent variables.

Table 4.7: Regression Analysis Coefficient Results

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.209	.469		.000	.000		
	Staff	.041	.218	.021	.188	.041	.826	1.210
	Skills	.503	.131	.394	3.845	.000	.933	1.072
	Condition	.098	.520	.021	.189	.030	.823	1.214
a. Dependent Variable: Willingness								

CHAPTER FIVE

DISCUSSION OF FINDINGS

5.1 Overview

The chapter outlines in detail the findings which have been described in the chapter four. In this case, the chapter therefore, compares the obtained findings with the past studies of the same phenomenon in the theoretical and empirical understanding. The chapter also presents the discussion of the findings relating the influence of motivation on willingness of health workers in providing TB services in Tunduma Town Council, including the stated objectives and the results of the tested hypothesis.

5.2 The Influence of Working Condition on Willingness of Health Workers in Providing TB Services

The findings indicated that working condition has significant influence on willingness of health workers to provide TB services in Tunduma Town Council. The findings indicated that health workers need to work in safe environment. Moreover, long working hours was highlighted to discourage the health care workers to work effectively. As Manyisa and Aswegen, (2021) posit that long working hours, inadequate resources, and poor working condition contributed to willingness of health workers to work effectively.

There also studies which give reasons to why health workers prefer to work in safe environment, as they think of possibility of being infected if they work in unsafe environment (Shu-Ling, 2020). This implies that workplace safety in TB service provision is about guaranteeing that health workers remain in a good physical

condition at work place, this increases workers' willingness to deliver better services. The health workers see themselves as to a safe environment when they are provided with personal protective equipment.

The obtained findings confirm that the Maslow Hierarchy of Needs Theory is applicable on the matter of willingness of health workers to work (Emmanuel, 2015). The health workers as human beings have an internal need which forcing them towards self-actualization and personal superiority. However, the findings also indicated that sometimes willingness of health workers to provide TB service is affected by factors like; poor infrastructures and complexity of patients care. Inline with other studies, the theme of hospital infrastructures and availability of resources have been drawn to influence willingness of health workers to work, for example, the study conducted in developing countries found health workers blaming about poor infrastructure and unavailability of resources to affect their willingness to work.

They were found to lack microscope or even laboratory which caused them to do diagnosis by using their own experiences only. Moreover, the situation caused them to be with not sure of the diseases they treat, badly enough this situation discouraged them to work effectively (Shattuck et al., 2018). However in contrast to the current study, Shattuck et al., (2018) did a qualitative study in which health care workers were not limited to express their feelings concerning the factors influencing their willingness to provide health care service.

5.3 The Contribution of Developed Skills on Willingness of Health Workers in Providing TB Services

The findings revealed that developed skills have significant influence on willingness

of health workers to provide TB services in Tunduma Town Council. The findings indicated that health workers in the study area need some skills to work effectively in service provision. The highlighted important skills needed by health workers include; technological skills, health management skills, leadership skills, new skills, and communication skills.

All these skills were proven to have the contribution on willingness of health workers to provide TB service. Furthermore, in the same line, in the study conducted on effects of TB treatment within primary settings in Uganda, the authors obtained that the willingness of health workers to work effectively is influenced by personnel developed skills. Moreover, the developed skills might be in the category of technologies, good leadership and good health management (Juma, 2018).

In addition, there are also studies which argue positively with the current study, as they obtained the justification of health workers to prefer developed skills in TB service provision. For example, in the study conducted in Eastern China, the authors obtained that health workers thought that professional skills become less due to lack of programs of developing skills, and limited opportunities for career development, however the situation resulted to poor service provision (Zou et al., 2022). This implies that when health worker lack developed skills, they may not provide TB service effectively.

5.4 The Influence of Adequate Staff on Willingness of Health Workers in Providing TB Services

The findings indicated that adequate staff is statistically and significantly influencing willingness of health workers to provide quality TB services in Tunduma Town

Council. The findings indicated that adequate staff in needed in working environment because it simplifies work. The health workers need; adequate number of staffs, professional health workers, and committed team, in-service trained staff, and competent team of supervisors. In reflection to the current findings, other scholars who conducted study to assess quality TB service in rural district in Uganda found that adequate number of staff reduces workload during service provision (Bulage et al., 2020). This implies that health workers are made with willingness to provide services when there is adequate number of staff in working place.

On the other side, not only inadequate number of staff is needed for improving willingness of health workers to provide service, there must be the professional staff who frequently receives in-service training to update their knowledge of working. Furthermore, the findings are concurring to what was obtained by other scholars who determined health worker motivation to perform systematic household contact TB investigation in South Africa, the authors found that shortage of professional health workers had negative effects to service provision (Kigozi et al., 2020). This implies that most of health workers get worries when they provide treatment for diseases in which the lack some professional skill to treat.

Moreover, it also very important to note that, it is through in-service training health workers could be imparted with professional skills to implement treatment of specific disease including TB service. Most of health workers need frequent training to update their professional; this is how they feel willing to provide service to patients because through training they get sure with what they implement as to their professionals.

Similarly, in the study conducted in Meru-Kenya to determine the motivational factors in service delivery, it was obtained that both adequate number of staff and professional staff had positive statistically significantly to quality service delivery. This implies that availability of professional staff is very necessary for willingness of health workers to work in providing TB services. As the issue of TB service provision involves perception of risk, and knowledge of the disease and its symptoms, this means high quality service is to be delivered by competent health care professionals.

CHAPTER SIX

CONCLUSION AND RECOMMENDATION

6.1 Overview

The chapter presents implications of the study theoretically; it also gives details on implications of the study to health centers. Furthermore, the chapter highlights the implications of the study to policy makers. Additionally, the also presents limitation and areas for further studies.

6.2 Summary of the Study Findings

The results indicate that working condition is among the factors that influence willingness of health workers to provide TB service in Tunduma Town Council. Most of health workers agreed that their willingness to provide TB services was influenced by factors like; safe environment, respect from people, working hours, inadequate resources, poor infrastructures, complexity of patient care and good quality protective equipment.

The study also found that willingness of health workers on providing TB service is influenced by developed skills which include factors like; leadership skills, improved technological skills, health management skills, new skills, application of developed skills, and communication skills. The study also found that another factor for willingness of health workers to provide TB service is adequate staff. The adequate staff was drawn to include factors like; adequate number of staff, professional health workers, and committed staff, in-service trained staff, and competent team of supervisors.

6.3 Conclusion

The study concludes that working condition is the motivational factor for willingness of health workers to provide TB services in Tunduma Town Council. The health workers needs safe environment in working place, they also need to be respected by patients and other people all the time, moreover there must be adequate resources to promote willingness of health workers to work effectively. Additionally, it is concluded that good quality and protective equipment are needed in working place to influence health workers to become willing to provide TB services.

The study also concludes that developed skills plays a role to create willingness of health workers to provide TB services in Tunduma Town Council. The health workers seem to believe that they can work effectively if they are always imparted with leadership skills, technological skills, health management skills and communication skills. Furthermore, the study concludes that willingness of health workers to provide TB service is influenced by adequate staff in Tunduma Town Council. The health workers tend to work effectively if they are in adequate number, also they can work willingly if there is adequate number of professional health workers, and committed staff. In addition, the study concludes that competent team of supervisors is very essential for influencing willingness of health workers to provide TB services.

6.4 Research Study Implication

6.4.1 Theoretical Implication

For the case of theoretical contribution, the current study had filled the gap ass shown by Emmanuel (2015) who explains the Maslow Hierarchy of Need Theory

argues that human beings have an internal needs which forcing them towards self-actualization and personal superiority. In that case, the Maslow Hierarchy of Need Theory should be applied in areas of motivation factors that create willingness of workers to provide service. Therefore, this study used the ideas of Maslow Hierarchy of Need Theory, which has been used from previous studies of motivation factors in particular working condition, developed skills and adequate staff. These results can be used by other researchers, in other developing countries in Africa other than Tanzania, especially on health sector.

With an assistance of Maslow Hierarchy of Need Theory as the supporting theory on motivation. The study has tested the variable willingness as the product of motivational factors. Moreover, Tanzania is one of the top 30 countries with high TB burden in the world (Mwaipopo and Lema, 2020). Therefore, this study is an addition to studies that have been conducted to the field of TB service delivery in the Tanzania context. As it has been highlighted by Mwaipopo and Lema (2020) that ending of TB disease in Tanzania can be successfully reached when more efforts are put to provide staff capacity buiding and motivating health workers to improve their willingness to work on the area of TB services provision. However, the current study was conducted in Tunduma Town Council in Songwe Region, morever the study included motivation factors such as working condition, developed skills, and adequate staff which were all found to be important in determining willingness of health workers to provide TB services.

6.4.2 Practical Implication

With the proven advantages of using motivational factors like working condition,

developed skills, and adequate staff (Bulage et al., 2020; Juma, 20218; Namakula et al., 2021; Zou et al., 2022) different argument are concerned with how motivational factors can influence willingness. However, in order for motivational factors to work, the key stakeholders are to involve indicators like working condition, developed skills, and adequate staff. This study has identified motivational factors as the determinants for willingness of health workers to provide TB services in context of Tanzania.

6.4.3 Policy Implication

The obtained results of the current study add more evidence on influences of the health sector in Tanzania to add efforts for improving working conditions, developed skills and adequate staff to emphasize willingness of health workers who provide TB services to work. In that case, the study therefore offers relevant information to assist in strategic decisions and policy formulation.

The National Health Policy 1990 needs a motivated workforce that would provide high quality healthcare with a high degree of efficiency and commitment. Although the policy providing direction regarding the health workforce in Tanzania, still the health sector is faced with serious shortage of adequate staff (Kigwangalla, 2012), developed skills and good working condition for health workers to work effectively. In that case, the current study provides good information on how formulate strategies to implement the existed policies effectively. The study highligts key components of motivation to consider during policy implementation for improving willingness of health workers to work.

6.5 Recommendations

6.5.1 Recommendation on Influence of Working Condition on Willingness of Health Workers in Providing TB services in Tunduma Town Council

The government through the Ministry of health should make sure that there is improved working conditions in Tunduma Town Council which can motivate willingness of health workers to provide TB service. This can be done by making sure that there is safe working environment, also to make sure that health workers are always provided with good and quality protective equipment.

6.5.2 Recommendation on contribution of developed skills on willingness of health workers in providing TB services in Tunduma Town Council

The government through the Ministry of Health should design different programs for skills development among the health workers who provide TB services in Tunduma Town Council.

6.5.3 Recommendation on Influence of Adequate Staff on Willingness of Health Workers in Providing TB services in Tunduma Town Council

The government through the Ministry of Health should recruit and employ more health workers to emphasize adequate number of staff to motivate health workers in providing TB services in Tunduma Town Council.

6.6 Limitations of the Study and Suggestion for Future Research

First, the study was limited to specific district in particular the Tunduma Town Council in Songwe region; however there are there are more than 26 regions and many Town councils. This means, the sample might not be the overall representation

of the whole population in the country of Tanzania. In that case, there is a need to extend the study to bigger populations before generalization could be made.

Second, although the study was aimed at understanding how health workers are motivated to provide TB services, the stakeholder engagement component was limited and did not include health workers associations. It is possible that the stakeholders concerning health workers associations would establish good motivational factors for willingness of health workers to provide TB services. Therefore, there is a need to include association of health workers in studies to obtain other motivational factors.

Third, this study was done quantitatively, this means, obtained information is limited without detailed information as no conversion was performed rather than using of questionnaire. Therefore, the study recommends future studies should be done qualitatively to explore and obtain detailed information from participants.

REFERENCES

Adam, A. (2020). Sample Size Determination in Survey Research. *Journal of Scientific Research and Reports*, *26*(5), 90–97.

Ako, A. (2020). Frontline Health Worker Motivation in the Provision of Maternal and Neonatal Health Care in Ghana. PhD thesis, University of Amsterdam, Netherland.

Anampiu, M. (2020). Assessment of Factors Influencing Service Delivery at Sub-County Hospitals in Meru County, Kenya. unpublished master dissertation, Health Systems Management of Kenya Methodists University.

Ashenafi, H., Adugna, O., Thanasekaran, P., Birtukan, K., Busha, G., Tamirat, A., Lamessa, A. & Eba, A. (2021). Predictors of Health-Care Workers' Unwillingness to Continue Working During the Peak of COVID-19 in Western Ethiopia: An Extended Parallel-Process Model Study. *Risk Management and Healthcare Policy*, 14, 1165–1173.

Babbie, F. (2010). Research Methods. *New York: Thornhill Publishers*.

Berndt, E. (2020). Sampling Methods. *Journal of Human Lactation*, *36*(2), 224-226.

Bernie, G. (2018). An investigation into building a strong employer brand for fast growing internet companies. Unpublished master disseation, Liverpool John Moores University, US.

Bhaga, T. (2020). The impact of working conditions on the productivity of nursing staff in the midwife obstetrical unit of Pretoria West Hospital. unpublished master dissertation, University of Pretoria, SA.

Bhatnagar, A. (2020). *Health worker motivation: role of individual, organizational and cultural factors: A health policy and systems research reader on human*

resources for health. World Health Organization.

Borghi, J., Lohmann, J., Dale, E., Meheus, F., Goudge, J., & Oboirien, K Kuwawenaruwa, A. (2022). How to do (or not to do) . . . Measuring health worker motivation in surveys in low- and middle-income countries. *Health Policy Plan*, 33, 192–203.

Bozzani, F. (2021). Incorporating feasibility in priority setting: a case study of tuberculosis control in South Africa. PhD Thesis, London School of Hygiene & Tropical Medicine, UK.

Bryman, A., & Bell, E. (2011). Research Designs. In: *Business Research Methods*, New York. Oxford University Press.

Bulage, L., Sekandi, J., Kigenyi, O. & Mupere, E. (2020). The Quality of Tuberculosis Services in Health Care Centers in a Rural District in Uganda: The Providers' and Clients' Perspective. *Hindawi Publishing Corporation*, 11.

Chen, T., Hung, L., Hsu, S., Tzeng, Y. & Chang, Y. (2022). Work Stress and Willingness of Nursing Aides during the COVID-19 Pandemic. *Healthcare*, 10(1446).

Emmanuel, O. (2015). Assessing the Impact of Motivation on the Work Performance of Nursee at the Amasaman Municipal Hospital. Unpublished mastr dissetation, University of Ghana, Accra, Ghana.

Ford, M., Cerasoli, C. P. & Nicklin, J. M. (2017). Intrinsic motivation and extrinsic incentives jointly predict performance: A 40-year meta-analysis. *Psychological Bulletin*, 140(4), 59–80.

Franco, L., Bennett, S. & Kanfer, R. (2021). Health sector reform and public sector

health worker motivation: a conceptual framework. *Soc Sci Med*, *50*(8), 1255–66.

Giovanni, B., Catherine, W., Linda, P., Lia, A. & Delia, G. (2021). The definition of tuberculosis infection based on the spectrum of tuberculosis disease. *Breathe*, *17*.

Gottert, A., Tracy, L., Sharif, H., Dakouo, S. P., Tim, A., Karen, B., Bellows, A., K, S., Sarah, C., Warren, S., & Pooja, S. (2021). Development and validation of a multi_dimensional scale to assess community health worker motivation. *Journal of Global Health*, *11*(4), 38–44.

Greene, W. (2010). *Econometric Analysis*, 5th Ed., New York University.

Juma, M. (20218). Examining the Effect of Service Delivery Factors on Timely Initiation of Tuberculosis Treatment Within Primary Care Settings in Uganda. The University of Texas School of Public Health, Texas, USA.

Kigozi, G., Heunis, C., & Engelbrecht, M. (2020). Community health worker motivation to perform systematic household contact tuberculosis investigation in a high burden metropolitan district in South Africa. *BMC Health Services Research*, *20*(882).

Kigwangalla, A. (2012). Job Motivation and Associated Factors among Health Workers in Urban Public Hospitals in Tanzania, Bleking Institute of Technology.

Kothari, C. R. (2014). *Research methodology: Methods and techniques*, 2nd Ed., New Delhi: New Age International.

Leonard, K. (2021a). An Evaluation of Motivation of Public Health Workers for Effective Work Performance: A Case of University Teaching Hospital.

Unpublished master thesis, University of Zambia, Lusaka, Zambia.

Leshabari, M., Muhondwa, E., Mwangu, M. & Mbembati, N. (2020). Motivation of health care workers in Tanzania: a case study of Muhimbili national hospital. *East Afr J Public Health*, *5*(1), 32–7.

Liu, Z., Xiang, J. & Luo, P. (2022). The Study of Maslow's Hierarchy of Needs Theory in the Doctor-Nurse Integration Teaching Method on Clinical Interns. *J Health Eng*., 18, 1-4.

Lyakurwa, D., Lyimo, J., Mulder, C., Pelzer, P., Koppelaar, I. & Heus, M. (2021). Assessment of training and mentoring for DR-TB care decentralization in Tanzania. *Human Resource for Health*, *19*(56), 1–13.

Majigo, G. S., Joachim, J., Manyahi, J. & Sambu, A. (2020). Prevalence and Incidence Rate of Tuberculosis Among HIV-infected Patients Enrolled in HIV Care, Treatment, and Support Program in Mainland Tanzania. *Tropical Medicine and Health*, *48*(76), 1-8.

Manyisa, M. & Aswegen, V. . (2021). Factors affecting working conditions in public hospitals: A literature review. *International Journal of Africa Nursing Science*, *6*(4), 28–38.

Marko, A. (2020). Assessing the prcatices, knowledge and perception of patients and healthcare workers towards prevention of Tuberculosisi in Dar es Salaam, Tanzania. Unpublished master thesis, University of Zambia, Lusaka, Zambia.

Mbilinyi, D., Daniel, M. & Lie, T. (2011). Health worker motivation in the context of HIV care and treatment challenges in Mbeya Region, Tanzania: *A Qualitative Study. BMC Health Services Research*, *11*(266), 1-8.

Mischa, W., Posy, B., Steve, T., Laura, W., Prudence, D. & Duane, B. (2020).

Motivation and retention of health workers in developing countries: a systematic review. *BMC Health Services Research*, *8*(247), 1-8.

Mondal, P. & Mondal, S. (2018). Quantitaive and qualitative research: A mixed method approach in educational science. *International Journal of Technical Research & Science*, *6*(2), 68–72.

Muthuri, D. N., Senkubuge, F. & Hongoro, C. (2020). Determinants of Motivation among Healthcare Workers in the East African Community between 2009–2019: A Systematic Review. Healthcare (Basel), 8(2), 164.

Mwaipopo, G. & Lema, A. (2020). Data Quality Assessment to Improve Tuberculosis Reduction Program Performance in Coast Region, Tanzania. *Tanzanian Journal of Population Studies and Development*, *27*(2), 21–38.

Namakula, J., Witter, S. & Ssengooba, F. (2021). Health worker incentive policies during and after the conficit in Northern Uganda: *A Document Review*.

National Bureau of Statistic and Regional Commissioner's Office Songwe. (2016). Songwe Region Socio-Econoic Profile 2015.

National Council for Technical and Vocational & Training, E. and. (2022). *Mapping* Healthcare Facilities for Students Training in Technical Institutions in Tanzania. URT.

National Tuberculosis and Leprosy Programme-NTLP. (2022). TB Prevalence in Tanzania. Retrieved on 12th Jan., 2022 from; https://ntlp.go.tz/tuberculosis/tb-prevalence-in-tanzania/.

Ngadaya, S., Mfinang, S., Wandwalo, R. & Morkve, O. (2020). Delay in Tuberculosis case detection in Pwani region, Tanzania. a cross sectional study. *BMC Health Services Research*, *3*(2), 1–8.

Ntinginya, N. (2020). Evaluation of potential surrogate markers to determine TB treatment response among TB patients in Mbeya, Tanzania. Unpublished master dissertation, Ludwig-Maximilians-Universität, Munich.

Rao, K. (2022). *Limitations Of Maslow 's Hierarchy of Needs Theory Merits*. https://www.bmindstoday.com/limitations-of-maslow-s-hierarchy-of-needs-theory-merits/.

Raza, A., Noor, W. & Fareed, M. (2020). Mediating the role of employee willingness to perform between career choice and employee effectiveness: Case in public sector universities of Pakistan. *International Journal of Innovation, Creativity and Change*, 11(1), 373–389.

Rolfe, B., Leshabari, S., Rutta, F. & Murray, S. (2018). The crisis in human resources for health care and the potential of a 'retired' workforce: case study of the independent midwifery sector in Tanzania. *Health Policy and Planning*, *23*, 137–149.

Sato, M., Mauf, D., Mwingira, U. J., Leshabari, M. T., Ohnishi, M., & Honda, S. (2020). Measuring three aspects of motivation among health workers at primary level health facilities in rural Tanzania. *PLoS ONE*, *12*(5).

Satya, M. (2022). Questionnaire Designing for a Survey. *The Journal of Indian Orthodontic Society*, 46(4), 37–41.

Saunders, M., Lewis, P., & A, T. (2009). *Research methods for business students* (5th ed.). Pearson Education Limited.

Shattuck, W., Bidwell, P., Thomas, S., Wyness, L., Blaauw, D. & Ditlopo, P. (2018). Motivation and retention of health workers in developing countries: a systematic review. *BMC Health Services Research*, 8(247), 1–8.

Shu-Ling, C. (2020). Working in a danger zone: A qualitative study of Taiwanese nurses' work experiences in a negative pressure isolation ward. *American Journal of Infection Control*, *44*(7), 809–814.

Surucu, L. & Maslakci, A. (2020). Validity and Reliability in Quantitative Research. *Business and Management Studies an International Journal*, *8*(3), 2694–2726.

Teo, J. K., Huot, S., Khun, S. & Pheng, T. (2022). Barriers to childhood tuberculosis case detection and management in Cambodia: the perspectives of healthcare providers and caregivers. *Research Square*, *2*(1), 1–19.

THIS, (2017). *Tanzania HIV Impact Survey*. THIS.

Weldegebriel, Z., Ejigu, Y., Weldegebreal, F., & Woldie, M. (2019). Motivation of health workers and associated factors in public hospitals of West Amhara, North-west Ethiopia. *Patient Prefer Adherence*, *10*, 159–69.

Yohanes, T. (2020). The Effect of Motivation on Employees' Performance in Public Sector the Case of Menz Mama Midir Worda Offices, Amhara Region, North Shoa Zone, Central Ethiopia. Unpublished master dissertation, University of Debre Birhan, Ethiopia.

Zou, G., Barbara, M., & Kielmann, K. (2022). 'You say you are a TB doctor, but actually, you do not have any power': health worker (de)motivation in the context of integrated, hospital-based tuberculosis care in eastern China. *Human Resources for Health*, *20*(55).

APPENDICES

Appendix 1: Questionnaire

THE INFLUENCE OF MOTIVATION ON WILLINGNESS OF HEALTH WORKERS IN PROVIDING TUBERCULOSIS SERVICE IN TUNDUMA TOWN COUNCIL

This research study gather data on the influence of motivation on willingness of health workers in providing Tuberculosis service in Tunduma Town Council.

SECTION A: DEMOGRAPHIC INFORMATION

Personal details

1. Age (Years)
   - i. 18-25 years ☐
   - ii. 26-35 years ☐
   - iii. 36-45 years ☐
   - iv. 46 years and above ☐
2. Your gender/sex is …….
   - i. Female ☐
   - ii. Male ☐
3. Level of education
   - i. Certificate ☐
   - ii. Diploma ☐
   - iii. Degree ☐
   - iv. Masters/specialist ☐
4. Your marital status is
   - i. Single ☐

ii. Married ☐

iii. Separated ☐

iv. Widow/widowed ☐

v. Divorced ☐

5. Staff occupation/cadre…….

i. Medical practitioner ☐

ii. Nurse ☐

iii. Laboratory personnel ☐

iv. Other health workers ☐

SECTION B: INFORMATION RELATED TO WORKING CONDITION

Kindly tick (√) in the appropriate box on the statement along, as your response regarding working condition. The ratings are on the following scale, 1=Strongly disagree, 2=Slightly disgaree,3=Disagree,4=Neither agree nor disagree;5 =agree; 6= Slightly agree; 7=Strongly agree.

A. Working condition

S/N	Statement	1	2	3	4	5	6	7
6	I work in a safe environment							
7	I used to get respect from people I work with							
8	My willingness to work effectively is affected by long working hours							
9	Inadequate resource leads to negative influence on willingness to provide TB service to patients							
10	Poor infrastructures affect our willingness to provide TB service effectively							
11	Sometimes my willingness to deliver TB services is affected by complexity of patient care							
12	I need good quality protective equipment to work effectively in TB service provision							

Note; 1= (Strongly disagree),2= (Slightly disagree),3=(Disagree),4= (Neither agree nor disagree);5 =(agree) 6= Slightly agree,) 7= (Strongly agree)

SECTION C: CONTRIBUTION OF DEVELOPED SKILLS ON PROVIDING TB SERVICES BY HEALTH WORKERS

Kindly tick (√) in the appropriate box on the statement along, indicating your level of agreement or disagreement on the following statement regarding contribution of developed skills on providing TB services by health workers on the 7-point Likert scale below: 1=Strongly disagree, 2=Slightly disgaree,3=Disagree,4=Neither agree nor disagree;5 =agree; 6= Slightly agree; 7=Strongly agree.

B. Developed skills

S/N	Statement	1	2	3	4	5	6	7
13	We need improved technological skills to work in providing TB services							
14	Our work of providing TB services needs a developed leadership skill to make it functional properly							
15	We need good health management skills for proper provision of TB service							
16	Limited opportunities for skills development make our work to be difficult							
17	New skills is very helpful in career development							
18	Application of developed skills in working environment simplifies works							
19	Developed communication skills with patients is very necessary in TB service provision							

Note; 1= (Strongly disagree),2= (Slightly disagree),3=(Disagree),4= (Neither agree nor disagree);5 =(agree) 6= Slightly agree,) 7= (Strongly agree)

SECTION D: ADEQUATE STAFF ON PROVIDING TB SERVICES BY HEALTHCARE WORKERS

Kindly tick (√) in the appropriate box on the statement along, indicating your level of agreement or disagreement on the following statement regarding influence of adequate staff on providing TB services by healthcare workers on the 7-point Likert scale below: 1=Strongly disagree, 2=Slightly disgaree,3=Disagree,4=Neither agree nor disagree;5 =agree; 6= Slightly agree; 7=Strongly agree.

C. Adequate staff

S/N	Statement	1	2	3	4	5	6	7
20	Adequate number of staff reduces workload to improve willingness of healthcare providers in TB service							
21	TB services provision needs professional health workers							
22	TB service provision is done properly when there is a committed team of staff							
23	Presence of in-service trained staff is needed for TB service provision							
24	TB service providing needs competence team of supervisors							

Note; 1= (Strongly disagree),2= (Slightly disagree),3=(Disagree),4= (Neither agree nor disagree);5 =(agree) 6= Slightly agree,) 7= (Strongly agree)

SECTION E: WILLINGNESS OF HEALTH WORKERS IN PROVIDING TB SERVICES

Kindly tick (√) in the appropriate box on the statement along, indicating your level of agreement or disagreement on the following statement regarding willingness of health workers in providing TB services on the 7point Likert scale below: 1=Strongly disagree, 2=Slightly disgaree,3=Disagree,4=Neither agree nor disagree;5 =agree; 6= Slightly agree; 7=Strongly agree.

D. Willingness of health workers in providing TB service

S/N	Statement	1	2	3	4	5	6	7
25	I really throw myself into TB service provision							
26	I usually make more efforts until I completely provide services to patient with TB							
27	I get excited when I provide TB services to patients							
28	I usually provide good service to patients							
29	I always enjoy my work							
30	I am happy with how I allowed to work freely							

Note; 1= (Strongly disagree),2= (Slightly disagree),3=(Disagree),4= (Neither agree nor disagree);5 =(agree) 6= Slightly agree,) 7= (Strongly agree)

Thank you for your cooperation

Appendix 2: Research Clearance Letters

THE UNITED REPUBLIC OF TANZANIA

MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY

THE OPEN UNIVERSITY OF TANZANIA

Ref. No OUT/ PG202085824 **5th April, 2023**

Regional Administrative Secretary,
Songwe Region,
P.O Box 23,
SONGWE.

Dear Regional Administrative Secretary,

RE: RESEARCH CLEARANCE FOR MR. MALNESTE JAMES, REG NO: PG202085824

2. The Open University of Tanzania was established by an Act of Parliament No. 17 of 1992, which became operational on the 1st March 1993 by public notice No.55 in the official Gazette. The Act was however replaced by the Open University of Tanzania Charter of 2005, which became operational on 1st January 2007.In line with the Charter, the Open University of Tanzania mission is to generate and apply knowledge through research.

3. To facilitate and to simplify research process therefore, the act empowers the Vice Chancellor of the Open University of Tanzania to issue research clearance, on behalf of the Government of Tanzania and Tanzania Commission for Science and Technology, to both its staff and students who are doing research in Tanzania. With this brief background, the purpose of this letter is to introduce to you **Mr. Malneste James, Reg. No: PG202085824)** pursuing **Master of Project Management (MPM)**. We here by grant this clearance to conduct a research titled **"Impact of Motivation on Willingness of Health Workers in Providing Tuberculosis Services: A Case of Tunduma Town Council in Tanzania".** He will collect his data at Tunduma Town Council in Songwe Region from 6th April to 6th May 2023.

4. In case you need any further information, kindly do not hesitate to contact the Deputy Vice Chancellor (Academic) of the Open University of Tanzania, P.O.Box 23409, Dar es Salaam. Tel: 022-2-2668820.We lastly thank you in advance for your assumed cooperation and facilitation of this research academic activity.

Yours sincerely,
THE OPEN UNIVERSITY OF TANZANIA
Prof. Magreth S.Bushesha
For: VICE CHANCELLOR

JAMHURI YA MUUNGANO WA TANZANIA
TAWALA ZA MIKOA NA SERIKALI ZA MITAA

HALMASHAURI YA MJI TUNDUMA
(BaruazotezilandikwekwaMkurugenziwaMji)

Nukushi: 025 - 2530233
Mkurugenzi Mji,
Simu Na: 025–2530404
Baruapepe:td@tundumatc.go.tz
Tovuti;www.tundumatc.go.tz

S.L.P 73,
TUNDUMA – MOMBA,
TANZANIA

Unapojibu tafadhali taja;

KUMB.NA.TTC/02/7/96 **28/04/2023**

Mkuu wa Divisheni ya Afya,
Halmashauri ya Mji,
S.L.P 73,
TUNDUMA.

YAH: KUMTAMBULISHA BW. MALNESTE JAMES.

Kichwa cha habari hapo juu cha husika.

2. Ofisi imepokea barua kutoka Ofisi ya Mkuu wa Mkoa yenye **Kumb. EA.224/268/01/119** ya tarehe **20/04/2023** ikimtambulisha mtajwa hapo juu kutoka chuo Kikuu Huria anayesoma fani ya **"Masters Of Project Management(Mpm).**

3. Kwa barua hii ofisi ya Mkurugenzi H/Mji Tunduma inamtambulisha kwako **Bw. Malneste James** anaekuja kufanya utafiti unaohusu **" Impact of Motivation on Willingness of Health Workers in Providing Tuberculosis Services: A Case Tunduma Town Council in Tanzania".**

4. utatakiwa kutoa ushirikiano katika utekelezaji wa majukumu yake. pia anatakiwa kuzingatia sheria, taratibu za nchi pindi anapotekeleza majukumu yake.

Nawatakia utekelezaji mwema.

Josephat Kayombo
KNY: MKURUGENZI
HALMASHAURI YA MJI TUNDUMA