THE IMPACT OF GOVERNMENT'S COMMUNICATION INTERVENTIONS ON THE PREVENTION OF TUBERCULOSIS IN KENYA:

THE CASE STUDY OF MGHANGE DAWIDA VILLAGE IN TAITA TAVETA COUNTY

BY:

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DECLARATION

This research project is my original work and all sources have been accurately reported and acknowledged. This document has not been previously, in its entirety or in part, submitted at any university in order to obtain any academic qualifications.

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This research project has been submitted for the award of Masters of Arts in Communication studies with my approval as the university supervisor.

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LIST OF ABBREVIATIONS

ACSM	Advocacy, Communication and Social Mobilisation
CHS	Centre of Health Solutions
CIDP	County Integrated Development Plan
CHW	Community Health Workers
DOTS	Directly Observed Treatment Short Course
XDR	Extensively Drug Resistant
GOK	Government of Kenya
HBM	Health Belief Model
HIV/AIDS	Human Immunodeficiency Virus & Acquired Immune Deficiency Syndrome
IOM	International Organisation for Migration
KANCO	Kenya AIDS NGOs Consortium
KNBS	Kenya National Bureau of Statistics
MDR	Multidrug-Resistant
MDGs	Millennium Development Goals
MOH	Ministry of Health
NGOs	Non-Governmental Organisations
SMS	Short Message Service
SPSS	Statistical Package for the Social Sciences
TB	Tuberculosis
TV	Television
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organisation

ABSTRACT

The study sought to investigate the impacts of government's communication interventions towards the prevention of Tuberculosis in Kenya. The broad objective of the research was to identify the different communication channels that the government of Kenya uses towards the prevention of Tuberculosis and how effective these channels are in combating the disease. The study went further to investigate whether these communication channels have had an impact in Mghange Dawida village when it comes to Tuberculosis prevention. The study used both behavioural and communication theories for the purposes of analysis and interpretations of both field and library data respectively. The theories are; The Health Belief Model and the Two -Step Flow Theory. The study employed qualitative and quantitative approaches. The quantitative approach focused on obtaining numerical findings while the interviews provided qualitative approach of the study. This focused on personal accounts, observations, descriptions and individual insights of the respondents. The research employed the combined approach for triangulation purposes. The population size of Mghange Dawida village is 3,968 and the sample size for this project is 100 villagers and 10 community health workers. The study interviewed 4 key informants; Medical doctor, county health commissioner, nurse and the chief. Therefore, the total number of respondents was 114. The study was conducted in Mghange Dawida village in Taita Taveta County. The data was collected using questionnaires and key informant interviews. The data was then analysed using descriptive statistics and presented in tables, graphs, and pie charts. A qualitative analysis was also conducted and presented in narrative form. The study revealed that the residents of Mghange Dawida village are indeed aware of the communication interventions used by the government towards the prevention of TB. Further the study revealed that the communication interventions have had a positive impact in the fight towards Tuberculosis as some of the respondents mentioned that they have sought medical attention after getting information on Tuberculosis. The study also found that the communication interventions used by the government are effective and residents of Mghange Dawida had a preference among the available channels. The radio and door to door campaigns topped the list of preferred communication channels. From these findings, the study set out some recommendations that include: 1) the government could provide adequate, detailed information on Tuberculosis by maximising the most commonly used communication channel which is the radio 2) more campaigns on Tuberculosis prevention using Kidawida language be undertaken and 3) to replicate this research to other areas outside Taita Taveta County.

CHAPTER ONE

INTRODUCTION

1.0 Overview

This chapter covers the background information, problem statement, research objectives and research questions, justification and limitations of the study.

1.1 Background to the study

Tuberculosis or TB is a common disease, which is infectious and in many cases lethal. According to the World Health Organization report of 2014, it is estimated that 9.0 million people were infected with tuberculosis yearly worldwide and 1.5 million died from the disease.

It has been noted that in most countries tuberculosis affects the most economically productive age group; that is the ages between 15 years to 34 years of age. This has resulted in increased levels of poverty in many families since their suffering from TB tends to prevent them from moving up the economic ladder (WHO, 2014).

Tuberculosis spreads through the air when individuals who have an active infection cough, sneeze, or otherwise transmit their saliva through the air. Common symptoms of tuberculosis include a fever, a chronic cough with blood-tinged sputum, and weight loss.

Tuberculosis (TB) has over the years been the major cause of the mortality rate in many countries and also a major cause of morbidity. According to USAID (2014), Kenya is one of the countries that has the highest tuberculosis (TB) burden in the world. The Kenya Tuberculosis prevalence survey (2015) indicates that TB is the 4th leading cause of death in Kenya. In Kenya, tuberculosis incidences among both adults with HIV and adults without HIV increased between the years 1998 to 2004. It was estimated by World Health Organization that the number of those

suffering of Tuberculosis stood at about 55% in 2005. On the other hand, in 2009, the estimated number of Tuberculosis patients living with HIV was estimated to be about 44%. This shows a decline trend from 2005. It remained relatively stable until 2007. However, between the years 2007 and 2012, TB prevalence declined significantly between 28-44% among HIV positive adults where prevalence stood at about 11-26% among adults who are HIV-negative. Significantly, in the year 2012 the Tuberculosis prevalence rate among adults with HIV was eight times as high as those without HIV, although approximately one thirds of the TB cases reported were attributed to HIV.

A recent survey by World Health Organization (2016) shows Tuberculosis treatment coverage (notified/estimated incidence) in 2016 stood at 45%. This shows that there is still need for urgent, comprehensive and effective actions that should be undertaken in order to control and manage tuberculosis in Kenya. Besides, the data on Tuberculosis cases is still scant and this has been argued to have contributed to the low Tuberculosis cases detection in Kenya, the fear and stigma attached to TB has also played a role, particularly because of the association of Tuberculosis and HIV/AIDS.

Rapid growth of the urban poor population and high poverty levels have also contributed to the Tuberculosis rise in Kenya (MOH, 2006). Taita Taveta County is no exception. According to a newsletter by Centre of Health Solutions (CHS); Kenya (2014), the number of Tuberculosis cases in Taita Taveta County increased from 242 in 1993, to 1030 in 2002.

According to Taita Taveta County Government; CIDP 2013 – 2017, about 14% of households in the county do not have any kind of toilet facility, which would contribute to spread of Tuberculosis.

Taita Taveta County is located in the coastal region and covers an area of 17,084.1Km. It is approximately 200 Km northwest of the coastal city of Mombasa. (CIDP, 2017).

The population of the county as of 2009 stood at 284, 657 (KNBS, 2009). Of this total, the number of female stood at 139, 323 and male were estimated to be 145, 334 respectively. Taita Taveta County was projected to be 306,205 in 2012. Its demographic composition is 149,869 females and 156,336 males. These were projected to increase to 329,383 and 345,800 in 2015 and 2017 respectively (KNBS, 2009). However, in Taita Taveta County, it is reported in the (CHS, 2014) that TB patients rarely follow TB treatment schedules as directed, and they rarely complete the course of treatment as well. This may be attributed to poor understanding of the directions for the treatment due to poor health communication. The rise could therefore be attributed to the following predisposing factors such as:

- Increased number of reservoirs of the tuberculii – the bacteria causing TB (the more people with infective bacilli, the more will be exposed and infected),
- Poverty levels since more than 60% (almost 153,000) of people living in the District are recorded as being in the category of absolute poor),
- Poor housing in that most people here tend to live in houses with no proper ventilation and lighting leading to dampness, overcrowding, poor ways of feeding consequently leading to lowered immunity.

On the other hand, several interventions have and continue to be employed in the county in order to control the spread of TB. For example, health education has been administered at individual and community levels. Besides, provision of drugs has also been done in almost all heath

facilities. However, defaulters of TB treatment have also been traced and their treatment resumed.

According to The Kenya Tuberculosis Prevalence Survey 2015-2016 undertaken in 45 counties revealed very critical information on the status of TB cases in Kenya beyond what was previously known; that there were 138, 105 TB incident cases per year.

Communication has played an important role in promoting health; this dates back centuries to the period of smallpox vaccination campaign in colonial America by Cotton Mather. Also towards the end of the 20th century communication had been noted to have played essential roles in public health programs. Health communication is defined as the art and technique of informing, influencing, and motivating people about the important health issues. (Healthy People, 2010)

Health communication includes disease prevention, health promotion as well as enhancement of the quality of life and health of people in a community (U.S. Department of Health and Human services, 2000). Although health communication covers an extensive range of areas, the central focus of the study is the provider-patient communication, specifically; issues involving patient adherence and patient care satisfaction. Similarly, health communication scholars (Burgoon, Bark, & Hall, 1991) assume that if individuals are provided with the right information they would adopt the recommended behavior. The health system in Kenya comprises of the ministry of health and its departments of medical research institutions and public health institutions, the ministry at the county concerned with health and the health personnel in health centers. The efficient channels for the flow of information between these entities are crucial in handling of health crises and other roles.

The stakeholders in the health sector such as doctors, nurses, clinical officers and health commissioners have the responsibilities of facilitating proper disseminations of information on

preventive medicine to the general public as well as patient education on diseases that require such form of education. Thus, using various communication mechanisms, the government of Kenya has always strived to tame the spread of TB pandemic. Campaigns, posters, advertisements and treatment sensitisations have been some of the avenues used by the government of Kenya in disseminating preventive information against TB.

The ministry of health (MOH) communicates health messages to the people of Taita Taveta through different channels such as: posters put up in health centers, in dispensaries, brochures handed out in hospitals, mass media; radio and TV, Internet and health talks in the community. All these channels have been used over time to prevent and treat diseases such as TB, HIV/AIDS, Malaria and Cholera. Of note however, is the fact that all these mechanisms, especially those involving communication, have been geared towards sensitisation of the adult on ways to protect and treat them.

The National Tuberculosis, Leprosy and Lungs disease program clearly states that

> *"Communicating for change of health-seeking behavior with regard to tuberculosis in today's Kenya is complicated. Unless as a country we think and plan ahead, simple provision of information alone will not divert the trend which TB is taking unless other new and innovative ways with wide reach to a vast number of the population is adopted."*

The provision of knowledge on the disease will encourage those affected with TB to step out and take appropriate and immediate methods of treatment that will save and prolong lives.

The Kenya Health Policy

The health policy 2014-2030 works towards attaining the highest standard of health by ensuring significant improvement in the overall status of health sector in Kenya. It focuses on two mainly obligations of health: rights to health in line with the Constitution of Kenya 2010 and its contributions to economic development as envisioned in Vision 2030 (MOH, 2014).

As a country we are challenged with emerging and re-emerging of diseases, of which TB is one of them. For this reason, the policy proposes probable solutions that will improve health services and make the health sector more efficient. Such solutions include: First is the attempts to achieve:

Equity in distribution of health services and interventions all over the country: This will be achieved by ensuring that all persons accessing health services are provided with equitable services irrespective of their demographic characteristics. The second proposed solution seeks to adopt the **People–centered approach to health and health care interventions in Kenya.** The People-centered approach focuses on the people's needs and their expectations; which includes patient empowerment, involvement of family members and health workers in deciding, implementations and monitoring of interventions. Thirdly, is the adoption of the **Participatory approach to delivery of interventions.** This will entail the involvement of all players in health in the design and delivery of the interventions towards attainment of the intended goals. Every key player should be expected to play their part in ensuring that health services are accessible and efficient for all. The other approach is the **Multi – Sectoral approach for the realisation of health goals**.

The approach is based on the acknowledgment of the importance of the social factors of health in the attainment of the overall health goals through the application of 'Health for all Policies' between 2014-2030. Similarly, the adoption of the applications of efficient health technologies is equally deemed as critical through the application of appropriate technologies in addressing health challenges. Such technologies should be accessible and affordable by all citizens. Efficiency here is meant to involve maximum utilisation of resources; in this case, it will ensure the maximum use of health resources towards achieving of the overall health policies objectives.

At the same time, the Social accountability model will be used. This involves reporting on performance, public awareness creations, promotion of transparency, and ensuring participation of the public in decision making process on health matters which concern their communities.

1.2 Problem statement

Out of the 22 high-burden TB countries, Kenya is ranked 13th on the list and has the fifth highest burden in Africa (Jaya Vadlamudi, 2010). According to the Ministry of Health, Tuberculosis is the 4th leading cause of mortality in Kenya. The first National TB Prevalence Survey since independence that was conducted in 2016, found that the TB prevalence to be 426/100,000 on all forms of TB.

The Government of Kenya has put forward various strategies to curb TB in Kenya. Use of communication channels is one strategy that is used by the government to disseminate messages on TB (MOH, Kenya Health Policy 2014-2030). The use of communication interventions is one of the important strategies in relation to TB prevention.

Despite the different communication strategies and channels put forward to combat TB in Kenya, the disease still remains a risk in many parts in Kenya. This research therefore, sought to study the impact of the currently used GOK communication interventions and how effective these interventions have been undertaken so far in a bid to arrest the TB pandemic in Mghange Dawida village in Taita Taveta County.

Evidence available indicates that clear health communication has and continues to play a significant role to understand and act upon health information received in any form of Media. Furthermore, it also guides materials presented to patients during communication, words used and how directions are given. For instance, Owoseni J. Sina (2014) argues that one of the

greatest health literacy problems is the crisis of misunderstanding medical information rather than of access to information.

The health conditions of the majority of Kenyans may be at risk as a result of the challenges in understanding and acting on the information disseminated to them which, in turn, may have negative impacts on health outcomes and the entire health care system in Kenya. Health communication interventions also strive to influence the actions of people so as to improve their health, to help the individuals in making informed decisions which may enable them to make better health decisions with regards to adherence. Besides the decrease of quality of patient care and the increase of medical errors has been attributed to poor inter-professional communications in the health care system. The other contribution towards poor inter-professional communication is the conflicts and confusions on scope of various delineated disciplinary roles between the health care providers. In the long run, poor inter-professional communication due to conflicts within the team adversely affects the quality of patient care as well as levels of treatment satisfactions (Owoseni J.S, 2014).

Ultimately, many communications scholars agree that clear communication is crucial to success of the public health practice. Thus policies to increase patient adherence and treatment satisfactions should be put in place, with a clear understanding that both satisfactions and adherence are necessary ingredients for an effective, ethical, and mutually beneficial medical encounter. Health communication covers vast areas from the prevention of diseases to health promotions, awareness on health care policies, improvements of the quality of life and health of community members (Healthy People, 2010).

1.3 Research objectives

The broad objective of this study is to identify the government communication channels used by the government and the effectiveness towards the prevention of TB in Mghange Dawida village in Taita Taveta County.

The specific objectives are:

i. To identify the various communication channels used by the Government of Kenya in the prevention of TB in Mghange Dawida Village.
ii. To assess the impacts of the communication interventions used in the prevention of TB Mghange Dawida Village.
iii. To assess the effectiveness of the government's communication interventions used towards the prevention of TB in Mghange Dawida village.

1.4 Research questions

Based on the above objectives, the research sought to examine a number of specific research questions related to communication channels used to create awareness of TB preventions among the people of Mghange Dawida village with regards to the information seeking behaviors of specific villagers and how such findings might be extrapolated to the general population. The questions are:

i. What are the channels and types of communication used by the government for the prevention of TB in Mghange Dawida village?
ii. What are the impacts of the government's communication interventions in Mghange Dawida village?

iii. How effective are the government's communication interventions used towards prevention of TB in Mghange Dawida village?

1.5 Justification of the study

This study sought to examine the impact of government's communication interventions towards the prevention of TB in Mghange Dawida village. Recent studies show that Tuberculosis is one of the leading causes of death in Kenya. While studies have been conducted in the various counties in Kenya on TB, there is a knowledge gap in specific villages within the county. For example, the recent survey done by MOH (2016) focused on all the counties in the country. There was no specific village that was studied. Mghange Dawida village was chosen as a target study population because from previous studies on TB, there has been an increase in the cases of untreated TB and deaths. According to Centre for Health Solutions Newsletter 2014, the number of TB cases in Taita Taveta County increased from 242 in 1993, to 1030 in 2002. Moreover, myths surrounding TB are still perpetrated in Mghange Dawida village.

In addition, there are no recent studies on communication interventions used towards the prevention of TB in Mghange Dawida village. The findings of this study may provide insights to a clearer and deeper understanding of the impacts of communication interventions used by the government and how the government can improve and enhance the further use of other communication channels to reach the Kenyan population towards TB preventions.

The study will further generate new empirical knowledge in this area for new effective communication methods that may be used to achieve change, particularly in the areas of TB preventions. The new information from this study will also be used to improve the existing policies relating to the government's communication interventions and also improve the aptness

of the medical and health care services offered. Finally, the study will identify possible new challenges toward TB preventions and possible additional solutions.

1.6 Significance of the study

Tuberculosis remains one of the leading causes of death in Kenya. This is despite the fact that the disease is preventable and curable. Therefore, this study is significant to the government of Kenya, communication experts and other organisations as it provides an understanding on the impacts of the currently used communication interventions and their effectiveness. This study will add on to the existing knowledge on the most effective communication interventions to use to communicate on Tuberculosis to Kenyans. The study will also inform communication teams within the government on how to best present information on Tuberculosis to the people of Kenya.

1.7 Scope & limitations of the study

The study was geographically restricted to Taita Taveta County. The sample size was drawn from Mghange Dawida village. The study was also limited to communication interventions used by the government of Kenya in the prevention of Tuberculosis in Kenya.

The main challenge that faced us during this study was the unwillingness of the respondents to participate in interviews. For instance; the key informants had difficulties scheduling meetings for the interviews. Most of them ignored email requests and even phone calls to sit down for the interviews. However, the respondents who finally confirmed and agreed to be interviewed were sufficient and statistically significant.

1.8 Operational definitions

Tuberculosis: an infectious bacterial disease that affects the lungs and is transmitted through the air

Communication interventions: Means through which the government uses to communicate to the citizens of Kenya

Health communication: The practice of communicating promotional health information with the aim of influencing and empowering individuals and communities to make informed and healthier choices.

Community Health Worker: members of a community who provide basic health and medical care to their community

Communicable disease: A disease that is spread from one person to another through a variety of ways that include breathing.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Tuberculosis (TB) dates back 9,000 years ago in the Neolithic era where traces of tuberculosis infection were discovered (*Hershkovitz I.; Donoghue H. D.; et al., 2008*). Over the centuries, mycobacterium tuberculosis has killed people more than any other infectious disease (Jama, 1999), even though treatment has been available that can cure most of these cases of TB. It is a communicable disease caused by the bacillus *Mycobacterium tuberculosis*. This bacterium is expelled in the air by a person infected with pulmonary TB; this can be through sneezing, coughing or spitting. A fairly small number of people infected with *mycobacterium tuberculosis* will develop tuberculosis. Previous studies have shown that TB is most common in men as compared in women. For example, the recent survey done by the MOH (2016), shows 809 males per 100,000 people are most affected by the TB. The survey by the Ministry of Health also shows that people in urban areas are most affected by TB as compared to those living in rural areas. This may be attributed to the congestion that is seen in several urban areas, particularly among the low- income groups living in unhygienic slum settlements.

Tuberculosis, over the years, has been ranked as one of the leading causes of death and is regarded as a global health problem affecting the overall health care structures of the world. There have been drugs in existence since 1980s that can cure approximately 90% of the reported cases. In the 1990s, there were efforts to improve TB care by adopting of the World Health Organization DOTS strategy that directly observed treatment short course (DOTS). It is regarded as one of the best curative methods.

It consists of the five components comprising government obligation, use of sputum smear microscopy to detect TB cases, regular first two months regimen treatment, drug supply and a homogeneous system that records and report treatment reports. Between 1995 and 2009, the DOTS strategy was implemented in 127 countries in which 41 out of 49 million TB patients were treated successfully. TB treatment among cases of smear-positive pulmonary cases (the most infectious cases) increased from 57% in 1995 to 86% in 2008 (Dye C, Hosseini M, Watt C., 2007).

This is now regarded as an extraordinary accomplishment by most standards. However, the problem of TB is still a long way from being under control. For instance, in 2011 most cases were reported in Asia (59%) and in Africa (26%); (Ottenhoff THM, Kaufmann SHE., 2012), Africa has the highest number of TB cases that are HIV-positive, standing at about 39%, which accounts for the 79% TB cases of people living with HIV worldwide (WHO, 2012). This statistic hasn't changed much since in 2016 Asia still reported the highest number of new TB cases standing at 45% while Africa had 25%. Seven countries; Nigeria, South Africa, China, India, Philippines, Pakistan and Indonesia accounted for 64% of the new TB cases. Between the years 1990 to 2001 global TB prevalence had stabilized and then began to decline with a 2.2% between 2010 and 2011. However, in 2011 the world recorded an estimate of 8.7 million new TB cases; of which it was estimated, 0.5 million were children and 2.9 million women, and 1.4 million deaths. These new TB cases were identified in low and middle-income countries. This accounted for 80% of new TB cases recorded globally (WHO, 2012). The number of TB deaths is unacceptably large given that most are unnecessary and can be avoided if there is access to appropriate health care and treatment.

In 2013 it is estimated that a total of 9.0 million TB cases were recorded worldwide, of which 1.3 million were number estimated of death (WHO, 2013). Whereas, in 2014 WHO global tuberculosis report shows that almost half a million TB cases were recorded. The WHO (2014) report also showed that the problem of drug-resistant tuberculosis is deteriorating with an estimate of 480,000 TB cases. However, this number is just an estimate taking into considerations of the fact that drug-resistance testing and treatment services are generally unavailable at most health facilities. Also, of the half a million estimated cases of Multi-drug-resistant tuberculosis (MDR TB) recorded globally, only 136 000 cases were officially diagnosed. It was noted that the rate of treatment completions by the TB patients remained at 48% in which there exists a wide gap between the people who are diagnosed and those who receive treatment. The 9% of people with MDR tuberculosis are estimated to be extensively drug- resistant (XDR) (WHO, 2014). These findings can be attributed to the stigmatization that is usually experienced by the TB patients; particularly in most developing countries elsewhere and the African countries.

Previous studies have pointed out the association of TB with witchcraft and a curse due to weakness among many cultures, thus many TB patients are scared of disclosing their status to others, even family to avoid ridicule or rejections. Significantly, many who are infected with bacterium often keep to themselves, viewing themselves as disease vectors (Helman, CG, 1997) or contagions. Consequently, most people in such societies are thus afraid of eating and or sharing with the TB patients due to fear of being infected with the disease. An interesting finding is how often peers who are HIV-positive stigmatize TB patients as they fear infection, knowing they are more vulnerable.

This makes it difficult for TB to be fully eradicated as treatment regions are not fully sufficient enough due to that cultural, politico-economic and environmental factors are vital determinants of access to and use of TB services (Ho MJ, 2004).

Communication is also a key ingredient towards TB preventions. The type of communication interventions used will determine whether the message has been delivered accordingly and messages are fully understood by the intended recipients. Use of effective interventions will also improve the interactions between the patients and the health providers .This is because there is a better relationship between the patient and the health providers. On the other hand, communications failure tends to contribute largely to the failure of government to respond to TB cases. For instance, people may not be aware of the signs and symptoms of TB, the importance of adhering to treatment to the end, the myth surrounding TB just because it has not been effectively communicated to them. This therefore, makes the need to devise strategies for effective communication towards TB prevention a critical component in the TB treatments in Kenya.

The World Health Organization (2007) recommends various strategies that are intended to encourage patients to adhere to TB treatments. Such strategies will ensure that there is early detection of TB and people are made aware as well as empowered about TB. Furthermore, the approaches used by the government should go a long way in reducing discrimination against the people with TB as well as reducing the stigma associated with TB. The WHO recommends that the countries may adopt the strategy of Advocacy, Communication and Social Mobilization (ACSM). However, ASCM is deemed to be most effective when carried out in combination with other strategies and not independently done.

2.2 Prevalence of TB in Kenya

Tuberculosis has long been a public health problem in Kenya for several years. It has also been identified as an indirect cause of mortality rate in Kenya among others like HIV/AIDS and Malaria (Ziraba et al., 2009). In 2012, Kenya reported a total of 103,159 TB cases of which 39% were also HIV positive. This is according to the guideline report for the management of tuberculosis and leprosy in Kenya (2013). The last TB prevalence survey was done before independence; 1958-1959. Significantly, however, TB statistics for "high burden" countries done by the World Health Organization ranked Kenya 18th globally out of the top 30 countries, with a total of 119,000 TB incidences, 10,000 of whom were HIV positive (WHO, 2016). This is an increase from the 2013 TB cases reported by the management of tuberculosis and leprosy in Kenya. Furthermore, the World Health Organization report also detailed the total TB incidence and the HIV negative TB Mortality of 8,600, while HIV positive TB Mortality were 3,900 (WHO, 2016).

In addition to the above, the Ministry of Health research on Kenya's TB burden showed that there are more TB cases in Kenya than we might have believed. WHO in 2015 estimated 233 per 100,000 TB incidences while the MOH (2016), estimated 558 per 100,000 TB incidences cases per year, which translates to approximately 138,105 TB incidences per year. The survey also noted that TB prevalence in male is twice as high as that of female, accounting for 809 against 359 per 100,000 and are more likely to be missed. Furthermore, it was noted that TB prevalence in female was more in women age 65 years and above. However, TB prevalence in HIV positive patients has since been controlled given that 83% of the TB cases were HIV negative. This shows that TB interventions put it place to control TB among people living with HIV have been successful over the years (MOH, 2016).

The other significant finding in the report indicated that 52% of the TB cases who did not have the usual two weeks or more cough. This may have contributed to the number of unaccounted TB cases in previous studies. TB cases were prevalent in urban areas; where 760 per 100,000 were recorded as compared to rural areas which stood at 453 per 100,000; this may be due to the high levels of congestion in the urban areas, poverty and social deficiency that has led to escalating of peri-urban slums.

According to the Ministry of health report (2016), health seeking behavior that might have contributed to this large TB disease burden include; individuals with TB symptoms not seeking health care, three quarter of TB patient who seek health care do not get diagnosed or the symptoms are missed and a quarter found to have TB did not report any TB symptoms. The crucial question therefore is 'how can this health seeking behavior be improved?' One possible solution could be the option and use of professionally structured communication campaigns against the spread of TB in Kenya. Communication models may play important roles towards TB patient seeking health care and adhering to treatment.

Strategic and deployment of communication strategies such as brochures, door to door campaigns, public barazas and the media; radio and TV are acknowledged as having the capacities to motivate any person who may be coughing for two or more weeks to visit a health facility for treatment; and to embrace other health-seeking behaviors related to TB (WHO, 2006).

Besides, studies have shown that people with minimal or no knowledge about TB are more likely to avoid visiting health care facilities for testing or treatment. For instance, studies in the United Republic of Tanzania showed that in certain areas, TB patients with poor knowledge about the disease are more likely to visit the traditional herbalists or healers rather than visit a health

facility (Tanzania Journal of Health Research ,2008)This shows that misconceptions about TB are deep-rooted.

According to WHO (2006) stigmatization of TB patients is experienced in most countries and this can be attributed to lack of adequate information on TB or misinformation on TB disease. For instance what it is, what causes it, how it is spread and treatment methods. Various cultures in the developing countries tend to associate TB with socially and morally unacceptable behaviors, while some assume that it is inherited. Beliefs, caused by inaccurate or lack of information, have led to people being alienated, discriminated against and even dismissed from work. Thus any structured communication strategy that is adopted to fight TB needs to support both the process of social change in society that seeks to eradicate the stigma and banishment of people with TB, as well as a process of behavioral change intended to persuade TB patients to seek treatments without fear of any stigmatization in any form.

Appropriate communication interventions can enable people affected by TB to voice their predicaments, seek medical treatments and follow treatments to the end since there would be clear understanding by the community of what TB is all about.

2.3 Communication interventions used by GOK towards the prevention of TB

The term "communication" may be defined as a process of exchanging information through speech, writing or using other forms of communication interventions/channels for example mass media, community media, and interpersonal communication among others

The government of Kenya has so far taken various steps of imparting knowledge through various communication interventions in the fight against the spread of TB. One of these interventions is using Media Advocacy to publicize information to the mass audiences in the country. Media Advocacy entails using mass media in the promotion of health; in this case creation of national

awareness on issues surrounding TB. It aims at cultivating positive attitudes and skills in various communities as a way of enhancing the community's voice for social change as well as shape the desired social justice principles that are regarded as the core basis of public health (Beauchamp, 1976). Media Advocacy is the approach that puts emphasis is on addressing the "power gap" rather than trying to fill the "Knowledge gap".

Mass media campaigns are widely used to transmit messages to people through uses of existing media. (Wakefield et al, 2010). They include but not limited to; posters, pamphlets, advertisements, television, radio, newspapers, billboards and social media among others.

The Transparency International Kenya (2014) published an article on 'Is it my business?' which showed that counties have used various types of media to make information available to the public. These include websites, newspaper, advertisements, electronic, social media, and noticeboards at the county government offices, use of mobile phones through SMS and community media. Though there seem to be gaps on the levels of knowledge of the people on vital information, suggesting a possible communication breakdown between county governments and the people. Other effective strategies include, village elders/chiefs, public forums such as the public barazas and church announcements as well. The new trend of communication in Kenya tends to lean on is the new media which the government now tends to use such as the social media platforms to share out information and communicate to the citizens.

According to WHO (2016) in July 2003, a statement from an expert consultation on communication and social mobilisation stated that:

> *"In terms of available treatments and an existing health infrastructure, more had been achieved to tackle TB than almost any other current health issue. However, for these interventions to achieve their full potential in TB case detections and treatments compliance, the central strategic challenge is now the implementation of strategic communication for the empowerment of people".*

But for communication interventions to make substantial contributions to health systems; as in specific tackling of tuberculosis, they must successfully handle issues like TB stigmatization, myths surrounding TB, adherence to treatments, increasing the rate of TB detections and guidance in policy formulation for purposes of improving the overall health systems in Kenya. Only then will these interventions be successful towards TB eradication in Kenya.

2.4 Obstacles to access of information for citizens in Kenya

Governments all over the world, generally tend to hold information to which the public has the right to access. However, it's not enough just having access to information rather information available to the public should be relevant, current, accurate, adequate and appropriate in different respects to ensure efficiency and levels of utilization by citizens. "The right to know is constitutionally enforceable against the government", (David O"Brien, 1981). In the case of Kenya, the right of access to information, which could be used in the promotion of the prevention of TB is provided in Article 35 of the Constitution of Kenya 2010. This provision could be used as an entry point for the development of structured campaigns against the spread of TB in Kenya. Such communication interventions could be used to promote the prevention of TB among the affected communities such as Mghange Dawida village in Taita Taveta County.

For instance, the last TB survey was done before independence and until the current survey which was done in 2016; it appears that TB may have been widespread more than presumed (MOH, 2016). With the current available information on TB, Kenyans will be able to take appropriate actions towards TB preventions. But it is necessary according to Collins Baswony (2014) that attempts are made to deal with the several obstacles to access of information such as some public officers acting as gatekeepers therefore not willing to allow access to information by the citizens, citizens lack of knowledge on their rights of access to information, impacts of low

level of necessary education among the community which tends to create language barriers especially if the contents are in a different language from their own. It has also been noted by Baswony (2014) that most printed materials are hardly read by the intended consumers even when such materials are posted in health facilities or distributed in the households. Collins Baswony attributes it to the poor reading culture among the locals (Collins Baswony, 2014).

2.5 Theoretical Framework

This study relied on both Behavioral Change theories and Communication theories. For instance, we consider some of the behavioral change theories such as the Health Belief Model, and communication theories such as the Two Step Flow Theory as collectively relevant to be applied in the prevention of TB.

2.5.1 The Health Belief Model (HBM)

The Health Belief Model is a theoretical model that focuses on the attitudes and beliefs of people. It has been used in this study as an attempt to explain and predict people's health behaviors. Health Belief Model (HBM) was applied to understand the reasons of preventive behavior and intention of health seeking. It was developed in the 1950's by psychologist Hochbaum, Rosenstock and Kegels in response to a failed free tuberculosis screening program offered by the U.S. Public Health Services. It is considered as one of the most influential models in health education and health promotions. HBM presumes that health behavior is determined by someone's beliefs and perceptions about a disease and the approaches used to minimize the chances of its occurrence (Hochbaum, 1958).

The Health Belief Model is founded on a premise that an individual will take health-related actions under the following circumstances: If an individual feels vulnerable to a disease/health conditions that can be avoided (perceived susceptibility) or in situations when the person

believes that the benefits of an endorsed health action outweigh the perceived consequences or barriers. On the other hand if the person who takes health recommended actions towards a disease, will avoid the negative health condition the perceived benefits or under circumstances when a person believes about the seriousness or severity of a disease which is understood as perceived seriousness. A person's belief that TB is personally relevant will contribute to taking the required action to preventing the problem. For example a person who feels that they are at risk of contracting TB will be willing to use the communication interventions on prevention of TB.

The second concept of the HBM has to do with one's beliefs. A person needs to believe that by taking certain preventive measures it will help in avoiding or preventing the problem. For instance a person who believes that TB is a serious ailment with bad consequences and the preventive measures highlighted are helpful, then they are more likely to consume the information given by the GOK.

Perceived benefits are beliefs on effectiveness of recommended health actions. For example the use of certain communication interventions will depend on perceived benefits of the person.

A recent addition to the HBM, which is relevant to our study, is the concept of one's self-assurance in the capability of successfully performing an action (self-efficacy) by Rosenstock and others which was introduced in 1988. This concept addressed the constant changing unhealthy habits of individuals. In this study, self-efficacy refers to the confidence in one's ability to use communication interventions present. Also of additional significance is the Cues for Action which are events, people or things that pushes someone to change a behavior.

The Health Belief Model is derived from cognitive theory that deals with the cognitive and emotional aspect with an aim of understanding behavioral changes. It largely focuses on how an

individual may think, understand and know. The theory may be used to explain the process in which people acquire and maintain certain behavioral patterns and provide the basis for interventions (Bandura, 1997). Previous studies have, however, concluded that it has a weak predictive power, predicting only around 10% of behavioral variance (Harrison et al.1992). Other criticisms arising from the model is that HBM components and guidelines about their inter-relationships are not well defined (Janz and Becker, 1984).

The HBM model was used as a theoretical framework for this study to explore the factors that lead the villagers of Mghange Dawida to use the communication interventions on TB prevention.

2.5.2 Two-step flow theory

The two-step theory proposes that information from mass media flow from influential people who pay more attention to the mass media message then offer their own interpretations of the content to the rest of the population; anyone who is willing to listen to them. This implies that a majority of people receive information from influential leaders (opinion leaders) through interpersonal communication rather than directly from various communication channels/interventions. The Two-Step model was formulated after a study done on voters' decision-making process during a presidential election campaign by Paul Lazarsfeld, Bernard Berelson, and Hazel Gaudet in 1948. They realised that most voters got the results about their candidates from other people who read about the campaign in the newspapers, but not straight from the newspaper. They concluded that movement of information through the word of mouth plays a critical role during the communication process as compared to mass media which has limited influence on the people.

Earlier on it had been presumed that mass media directly influenced its audience, the consumer of the information. Mass media was believed to have massive influence on people's behaviors

and decisions. However, this was criticized by the study done by Lazarsfeld (1948), which showed that's 5 percent changed their votes, influenced by the media.

In the journal Communication strategies in marketing: A theoretical perspective (Mohr et al., 1990), the writers review the two-step flow model of communication as a marketing strategy. In this instance, marketers review the intended audience or customers for the product or service. On careful analysis, specific individuals are identified as the trend setters and persuasive forces within this community or group of customers. Information about a product is then fed to them in a manner that arouses their interest and also persuades them to prefer the product or service. This leads the influential individuals or opinion leaders in this model to pass down the information to their peers within their circle of influence.

The passing down of information from their opinion leaders occurs with a form of interest and preference for the product passed down as well. The opinion leaders have some form of hold on their influence spheres and therefore this will lead to the product being liked or simply known about by the group influenced by these opinion leaders or trend setters. (October 1990). This example can as well be implemented by the government in fashioning the opinions of the various villagers they intend to reach for sensitization on TB in the village.

This two-step flow model of communication is more effective in groups that have some form of organised structure and hierarchy not withstanding a degree of loyalty. The model also presupposes that opinion leaders are those individuals who are often used as reference point, whether consciously or otherwise, by other members of the group. These individuals are presumed to consume more information, often discussing this information with other people in their circle of influence and are considered more "competent" with that kind of information with their peers in the group (Severin 1988).

The model also advocates for the use of many communication channels for information to reach the opinion leaders effectively as does the Diffusion Of Innovations theories (Farquhar et.al., 1984). Rogers (1983) further sheds light on the channels and differences in the two-steps flow involved in communication of this model. He identifies that the first step involves gathering of information while the last step involves transfer of influence. He ideally recognizes that mass communication is less effective in changing and influencing behaviour and attitudes of TB patient as opposed to having a personal interaction with them. TB health practices are far more effectively instilled in a patient at the lowest levels than by use of mass communication. This is a point that the government should often note when drafting appropriate communication interventions to be used in TB prevention.

In this study, the two step flow theory was used to determine whether opinion leaders in Mghange Dawida influence the resident's capacity to understand more on TB; and whether their choice of communication intervention is determined by the opinion leaders in the area.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Overview

In this chapter we discuss the overall research methodology, details on the research design, study population and sample size; sampling techniques, data collection methods, data analysis and presentations.

3.2 Research design

The research design refers to a strategy that uses a structured approach in a study and used by a researcher effectively to address the research problem by answering particular research questions (Joubert, Ehrlich, Katzenellenbogen & Abdool Karim, 2007). For example, Burns and Grove (2003) define a research design as "a blueprint for conducting a study with maximum control over factors that may interfere with the validity of the findings". For this study, the researcher used the descriptive research design. According to Kothari (2004), descriptive research is designed to obtain relevant and precise information about the status of a problem draw valid general conclusions. This research design was chosen because it concerns the characteristics of the villagers in Mghange Dawida village and how they interact with communication interventions used in the prevention of Tuberculosis.

3.3 Research Approach

For this study in Mghange Dawida in Taita Taveta County on TB, we have adopted the mixed method research approach. This means combining both qualitative and quantitative approaches. The quantitative approach focused on obtaining numerical findings while the qualitative approach focused on personal accounts, observations, descriptions and individual insights of the

respondents. The mixed method approach enabled the researcher to get a broader perspective of the overall research problem.

3.4 Study site

The study was conducted in Mghange Dawida village in Taita Taveta County. Mghange Dawida village is located in Wundanyi constiuency in Taita Taveta County.

3.5 Research population and sample size

A population is a group of people occupying the same geographical area with atleast one thing in common from which samples are taken from for measurement in a study (Kombo and Tromp, 2006). The population covered in this study includes the residents of Mghange Dawida village in Taita Taveta county;among them the county health commissioners, the county representatives, doctors and health workers in the health centres, dispensaries and hospitals within the county and the village. According to the KNBS 2009 Census, the total population of Mghange Dawida village was 3,968.

For this study,a significant sample of 100 villagers and 10 community health workers were purposively chosen. The study proposed the sample size be determined by use of a Taro Yamani formula since it is scientific and can be used in cases of large populations, (Sekaran, 1992).

$$n = \frac{N}{1 + N(e)^2}$$

n = sample size; N = population size;

e = level of precision or margin of error at 10% (standard value of 0.10).

Thus, the Taro Yamani formula was used in sample size calculation realizing a sample that is representative for the population of 3,968, where the sample size was got as:

$$n = \frac{3{,}968}{1 + 3968\ (0.10)^2} = 98$$

The study added 2 respondents to the sample size to bring it to 100.

A prepared questionnaire was then administered by our Research Assistants under the supervision of the lead researcher to a total of 100 villagers and 10 community health workers. The two categories of our population were statistically significant and they had competencies to provide us with the desired scientific answers.

3.6 Sampling method

A sample is a selected part of a population whose characteristics are studied, subjected to specific hypothesis to derive information about the whole (Webster, 1985). In this study, we used the purposive sampling techniques. Polit et. al., (2001) defines sampling as selection of a portion of the population as a representation of the whole.

Purposive sampling allows a researcher to source information from groups of people who are deemed to have the capacity to provide relevant answers. Parahoo (1997) defines purposive sampling as "a sampling method where the researcher deliberately chooses who to include in the study based on their ability to provide necessary data".

Use of purposive sampling depends on the decisions of the researcher when it comes to selecting the people to be studied. In this case the sample that is the focus of the study tends to be quite small.

3.7 Research methods

Data Collection is the process of collecting specific information with the intention of verifying or disproving some evidences (Kombo and Tromp (2006). This study used a mix of quantitative and qualitative methods. This allowed the researcher to get comprehensive data that is in a non-discrete form (Mugenda and Mugenda 2003). In this study, the researcher used questionnaires

and key informant interviews as methods of data collection. Secondary data collected to supplement the primary data that was collected in the field. This involved analysing the key informants responses, journals, newapapers and published materials with information on TB and communication interventions.

3.7.1 Instruments for data collection

a) Questionnaires

The study relied on the primary data which was generated from the field through administration of questionnaires to our respondents who were purposively selected. The questions were in structured and unstructured form. They were also both open-ended and close-ended questions, which required the subjects to tick the relevant boxes or write a few points/comments/suggestions. The prepared questionnaires were administered after a preliminary pilot by trained undergraduate and post graduate students in communication research who are also familiar with research techniques and data collections. These research assistants had the professional capacity to ask follow up and probing questions as well. The opinions of the respondents were collected on a 5-point Likert scale.

b) Key informant interviews

Key informant interviews, according to (Kumar 1989) are in-depth interviews undertaken with people who have specialised knowledge on what is going on in a particular society or forum. Our purpose for using key informant interviews in our study aimed at collecting information from health specialists who are also regarded as key opinion makers in Health Systems particularly in the Government's communication interventions towards TB preventions in Taita Taveta County. These key informants were purposively selected. They included the County Health Commissioners, the County Representatives, Doctors and Health workers in the health centres,

dispensaries and hospitals within the County and the village. The information was gotten through face to face interviews and through mobile telephone interviews with the respondents who did not have time.

3.8 Data analysis and presentation

The study relied on the primary data, which was generated from the field through administration of questionnaires to our respondents who were purposively selected .Given their past training on Research Methodology, these research assistants had the professional capacities to ask follow up and probing questions for our research. Secondly, the field data was augmented with the secondary data, which was sourced from the Libraries, Books, Journals, Magazines, Newspapers, Internet, GOK Policy Documents and other International Specialized Policy Documents from known relevant organisations e.g UNICEF and World Health Organization working with Kenya on health matters.

The data collected was assessed using SPSS and presented as tables, graphs and pie charts. These were in turn used as part of the quantitative data, together with the qualitative data for our analysis and interpretations of the chapter 4 of the study.

3.9 Research ethics

The research was conducted according to the research guidelines. The potential respondents were informed about the research and the purpose of the research. The researcher explained to the respondents that the study was solely for academic purposes. The data collected during the study period, as is indicated in the data collection tools, was treated in confidence and used purely for academic purposes. The names of the respondents were also not mentioned in the study as indicated in the data collection tools.

In addition, the proposal was presented to a panel of examiners and upon passing; a certificate of field work was issued (see Annex 3) to allow me to proceed for field work. On successful completion of field work, I presented my findings to a panel of examiners who gave me recommendations for my work. After incorporating the recommendations from the panel, I was presented with a certificate of corrections (see Annex 4). Finally, the research was subjected to a test of plagiarism according to the University's guidelines and I was issued with an antiplagiarism certificate indicating the originality of the work (see Annex 5).

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATIONS

4.1 Overview

In this chapter we discuss statistical presentations and analysis of the data collected from our study. The data was collected through the use of questionnaires and interviews as part of the research instruments. Two types of questionnaires were designed in line with the objectives of the study. One set was administered to the villagers and the other was administered to the Community Health Workers (CHW). An interview guide was also designed for the Key Informant Interviews.

4.2 Demographic characteristics of the respondents

In the study, 110 questionnaires were administered. 100 were administered to the villagers and 10 were administered to the CHW. Out of the 100 that were administered, 85 were completed and returned. This totals to 85% return rate. For the CHW there was a 100% return rate. The socio-demographic characteristics considered were gender, age, marital status, level of education, job occupation and income.

4.2.1 Gender of respondents

The study sought to know the respondents gender to determine the composition of the male and female in the village of Mghange Dawida. This was of significance to the study as gender is an important variable when it comes to health interventions. This was done to make a comparison between the genders as a way of knowing the difference in their responses as detailed in table 4.1

Table 4.1: Gender of respondents

Gender	Frequencies	Percentage distributions (%)
Male	44	52
Female	41	48
Total	**85**	**100**

Source: Field Survey, 2017

Table 4.1 presents the distribution of participants by gender. 52% of the respondents were male while the remaining 48% were female. The survey considered gender balance in the selection of the respondents. However, there were more male respondents, though the gap is small. On the other hand, for the CHW the female were the majority with a representation of 60%, while the male were 40%. This shows that the findings in this study were gender balanced and encompass the views form both sexes which is significant for the study as communication interventions target both sexes.

The significance of the data on table 4.1 indicates that the male gender responded to our data with a higher margin. This implies that more men are aware of communication interventions used by the government in the prevention of TB than female. The implication is therefore that this has an impact on the communication interventions used by the government in the village since most females are not aware of the interventions.

4.2.2 Age of respondents

One of the questions that we put to our respondents dealt with the distribution of various age brackets. This is important for the study when we shall later measure levels of awareness on TB among different age groups in Taita Taveta County and how they respond to information given to them. The distributions are as detailed under Table 4.2.

Table 4.2: Age of respondents

Age (Years)	Frequencies	Percentage distributions (%)
18-25	15	18.1
26-33	21	25.3
34-41	25	30.1
42-49	12	14.5
50 and Above	10	12.0
Others	2	0
Total	**85**	**100**

Source: Field Survey 2017

In Table 4.2, the distributions by age brackets were as follows: the largest number of respondents was from the age groups between 34-41 years which stood at 30.1%. This was followed by 26-33 years' age group with a 25.3% response rate. The other age bracket of between 18-25 years were 18.1% and 14.5% were in the age bracket of between 42-49 years. The least age group was between 50 and above years with a representation of 12%. The findings in this study thus showed that more than a half of our respondents were between the ages 26 years to 41 years; consisting mostly of the youths, with a representation rate of 55.6%. Though it should be noted that two of the questionnaires had this question blank which is why the frequency totaled to 83 instead of 85 response rates. For the CHW 80% were between the ages of 26 to 41 years old which means that most of them were still in their youths while 20% were between the ages of 42 to 50 years.

4.2.3 Marital status of respondents

Marriage is among the important social institutions. The attitudes and perceptions of a person can differ based on their marital status. Marital status of the respondents is significant to the

study when we shall measure the level of awareness of communication interventions and how they respond to them.

Table 4.3: Marital status of respondents

Marital Status	**Frequencies**	**Percentage distributions (%)**
Single	28	32.9
Married	42	49.4
Widowed	4	4.7
Divorced	5	5.9
Others	1	1.2
Total	**85**	**100**

Source: Field Survey 2017

In table 4.3, a total of 49.4% of the respondents indicated that they were married. Whereas a total of 32.9% indicated that were single by the time the study was conducted. Significantly, 4.7% were widowed while 5.9% were divorced. Only one respondent indicated that he/she was separated from their spouse.

4.2.4 Level of education of respondents

Education might affect a person's attitude and understanding towards particular communication. The level of response is likely to be determined by his educational status. Therefore, it is important for this study to understand the education level of the respondents as this would help in understanding how they respond to different channels of communication used by the government as shown in table 4.4.

Table 4.4: Level of education of respondents

Level of Education	Frequencies	Percentage distributions (%)
Never been to school	1	1.2
No formal Education but can read and write	2	2.4
Primary	28	32.9
Secondary	35	41.2
Diploma	13	15.3
University degree	5	5.9
Other	1	1.2
Total	**85**	**100**

Source: Field Survey 2017

The findings in table 4.4 indicates that majority of respondents have a secondary certificate totaling 41.2% whereas those with primary certificate stood at 32.9% response rate respectively. Only a 21.2% had a higher learning certificates; a diploma and a degree combined.

4.2.5 Occupation of respondents

A person's occupation has an effect on how he or she looks and understands a problem. In addition, an individual's occupation determines the quality of life and income they derive from it. Therefore, the study sought to find out how occupation influences the way the respondents respond to information on TB. The findings are shown on the table 4.5

Table 4.5: Occupation of the villagers

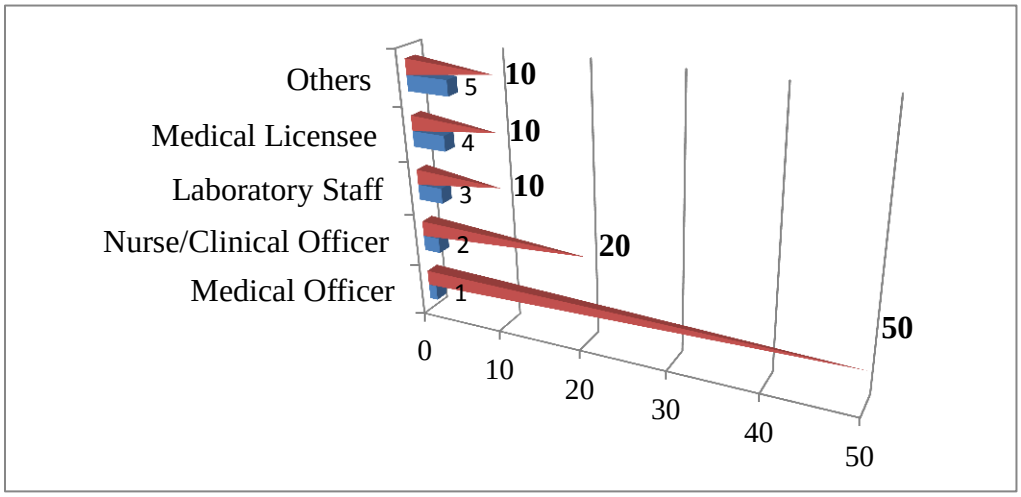
Work	Frequencies	Percentage (%)
Casual Worker	47	57
Unemployed	6	7
Housewife	10	12
Professional/works in an office	5	6
Farmer	1	1
Business Owner	13	16
Others	1	1
Unanswered	2	0
Total	**85**	**100**

Source: Field Survey 2017

Table 4.5 shows the occupation of the respondents of whom the majority totaling 57% reported that they were casual workers. On the other hand, 16% were business owners, while 12% were housewives. But a significant 7% of the respondents were unemployed while a 6% had professional jobs or worked in offices. On the contrary, one identified herself as a 'cleaning lady' who deals in washing of clothes for various households in her area. It should be noted that two respondents left this question blank, thus a total response rate of 83 instead of 85 as expected.

Figure 4.1 shows the occupation of the CHW. This is significant to the study when we later measure the communication channels used by the CHW based on their occupation.

Figure 4.1: Occupation of the CHW



Source: Field Survey 2017

Figure 4.1 shows the occupations of the CHWs of whom the majority are medical officers totaling 50%. This is followed by Nurses/Clinical Officers at 20%. Majority of them have been in their respective professions for two to five years, represented by a 40% response rate and the other 60% had worked for over 5 years.

4.2.6 Income of respondents

Income shapes the economic conditions of an individual. This is likely to have an impact on the responses the individual gives about a problem posed to them. In this study income is one of the variables we have used as it is significant in understanding how this has an impact on the type of communication preferred. The data in relation to income is presented on table 4.6.

Table 4.6: Income of Respondents

Income	Frequencies	Percentage (%)
Daily	24	28.2
Weekly	24	28.2

Monthly	28	33
Total	**76**	**99.4**
Not Applicable	9	10.6
Total	**85**	**100**

Source: Field Survey 2017

From the Table 4.6 the income levels of the respondents were as follows; majority with a 33% were paid on a monthly basis, while 28.2% of the respondents reported that they are paid their dues on a daily and weekly basis each, totaling to 56.4%. From the study, it was observed that a 10.6% of the respondents did not consider this question applicable to them since they didn't have a fixed source of income, there are some who said:

> *"Koko ngelo dipata magome mengi, lakini ngelo zima ndedine hata kibarua chochose". This translates to: there are days we get good money while others we go for weeks or even months without income"*

4.2.7 Distance to the nearest health clinic or hospital

Our study also sought to find out the distance from the respondents' home to the nearest clinic/hospital. This is important as one way of determining any difference between those who live near the health clinics and their attendance to those clinics as compared to those who live far away. The details are as indicated in Table 4.7.

Table 4.7: Distance to the nearest health clinic or hospital

Distance	**Frequencies**	**Percentage Distributions (%)**
0-10 km	80	94.1
11-20 km	3	3.5
Monthly	2	2.4
Total	**85**	**100**

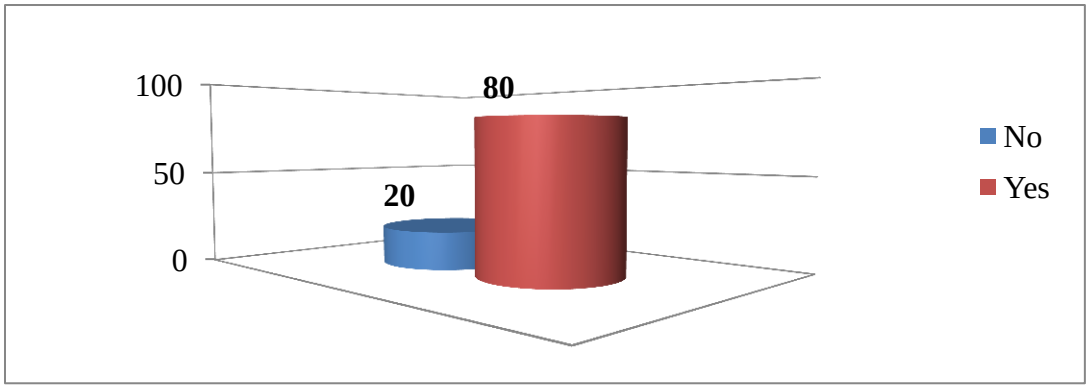
One of the findings was the proximity of the respondents to the nearest health clinics. A significant number totaling to 94.1% indicated that they live maximum distances of 10km or less

distance from their household to the nearest clinic or hospital. On the other hand, a total of the respondents of 4% indicated that they live between 11-20 km away from a health facility. While the 90% proximity to hospital is commendable and advantageous to the patients, the 11- 20 km is indeed a serious challenge for our rural respondents to attend TB clinics regularly.

4.2.8 Direct contact with TB patient

As the CHW perform their duties their contact with TB patients is close to inevitable. The study sought to find out how many of the ten CHWs had come into contact with TB patients for the last one year.

Figure 4.2: Direct contact with TB patient



Source: Field Survey 2017

A total of 80% of our respondents as detailed in the figure 4.2 had come across patients with TB while a significant number of 20% had not either at the health facilities where they are based, at their own households or anywhere outside their households in the last one year. However, three of the community health workers had come into contact with TB patients in both their households and in the health facilities. Two CHWs came into contact outside their households and in a health facility. Only one of the CHW had come into contact outside their household only and one CHW in a health facility.

4.3 TB Awareness

4.3.1 Aware of TB prevention campaign strategy

The study sought to find out how many of the respondents were aware of TB prevention campaign strategies being used in Mghange Dawida village in Taita Taveta County towards TB prevention. This is very significant to our study in order to determine first whether the villagers of Mghange Dawida are aware of any campaign strategies used by the government. This would further help us understand whether the strategies are effective and if so the extent of effectiveness. Table 4.8 shows the findings.

Table 4.8: Awareness on TB prevention campaign strategy

Income	**Frequencies**	**Percentage distributions (%)**
No	13	15.3
Yes	72	84.7
Total	**85**	**100**

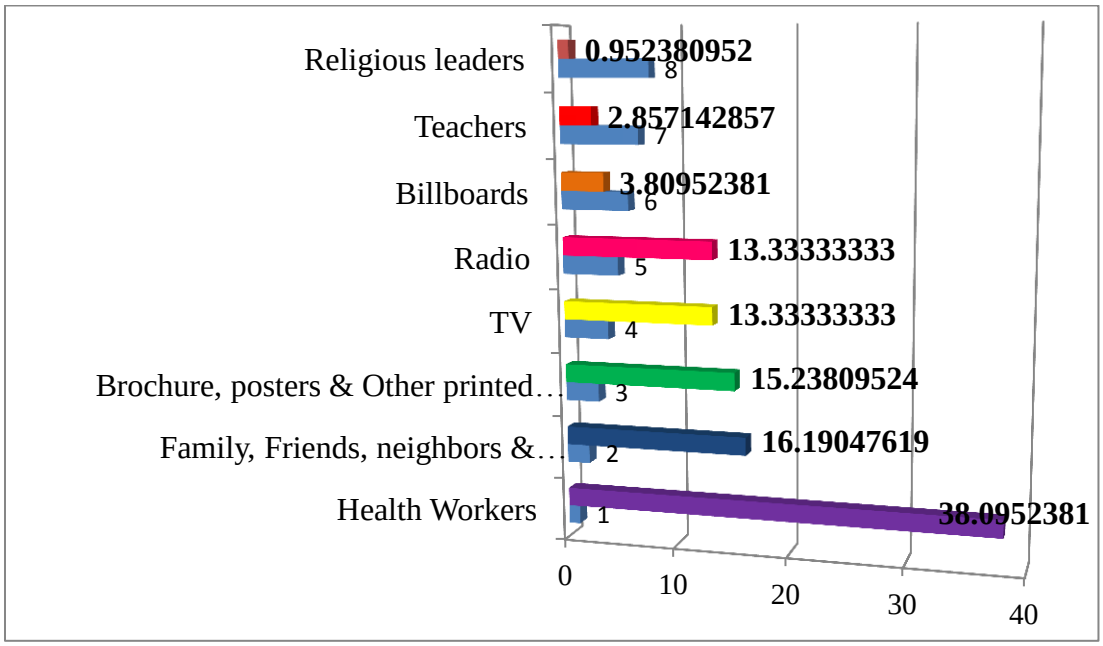
Source: Field Survey 2017

An impressive number of our respondents totaling 84.7% response rate said 'yes' to knowing TB prevention strategies being used in their village; this means that as a result of the TB campaigns conducted in Mghange Dawida in Taita Taveta County, most of the villagers are aware or at least have knowledge about these strategies. On the contrary, a significant number standing at 15.3% of the respondents said that they were not aware of any TB campaign strategies being used in their village. This raises concerns as to why this is the case, the challenges or the gaps in the current campaign strategies notwithstanding the fact that over 80% said they are aware of the campaigns against TB in Mghange Dawida in Taita Taveta County.

4.3.2 Where did you first learn about tuberculosis or TB

The researcher sought to know the respondents first source of information they had concerning Tuberculosis. This is important to the study to determine whether the villagers of Mghange Dawida in Taita Taveta County know the available communication intervention channels used by the government towards the prevention of TB. Figure 4.3 shows the results findings.

Figure 4.3: Source of information on TB



Source: Field Survey 2017

A big percentage of 38% said they got the information from the Health Workers. When the CHWs were asked if they had ever provided any form of education and communication interventions that villagers could use on access to information on TB, a significant number of 80% had said 'Yes'. Off the 80%, a 30% disseminated the information on a monthly basis, another 30% after every three months, a 10% in every two months and finally the remaining 10% on a weekly basis. This shows that the health workers continue to play a key role in

dissemination of relevant information concerning TB in the villages. This was followed by 'Family, Friends, Neighbors & Colleagues', 'Brochure, posters & printed materials', 'Radio' and 'TV' with 16%, 15%, 13% and 13% respectively. Very few respondents, that is a 1% first learnt about TB from the religious leaders in their areas.

4.3.3 Information related to Tuberculosis

The study sought to find out villagers in Mghange Dawida who have in the past received information in relation to TB and those who are yet to receive information on the same. This is significant to the study as the findings will be used to later assess the level of awareness about TB in Mghange Dawida.

Table 4.9: Information related to TB

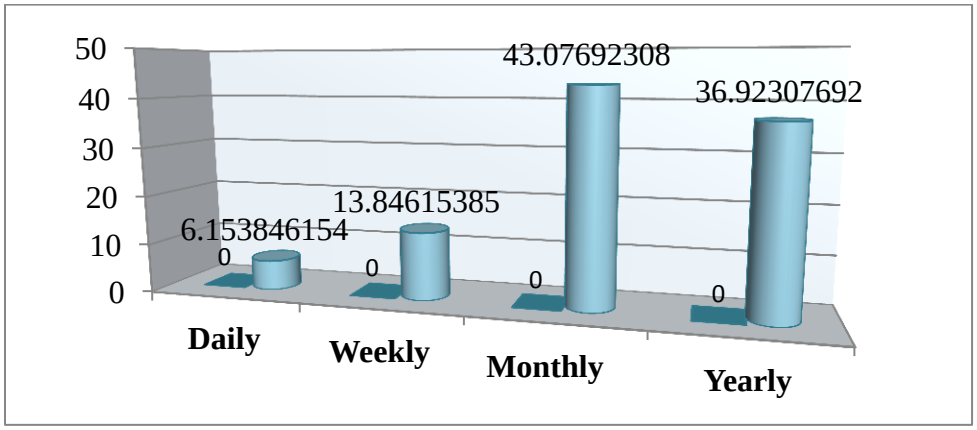
	Frequencies	**Percentage distributions (%)**
No	20	23.5
Yes	65	76.5
Total	**85**	**100**

Source: Field Survey 2017

A majority of our respondents totaling 76.5% said they have received information related to TB. Whereas a total of 23.5% said they had not yet received any form of information on Tuberculosis. This shows that a higher percentage of the villagers are aware of TB and have received information on TB. However, 23.5% that had not received any form of information on TB is significant and it is important to find out why that is the case.

The study went further to investigate how often our respondents got the information related to TB preventions as detailed in figure 4.4. This is significant to the study because understanding the frequency of getting information on TB is related to how well the prevention interventions in Mghange Dawida village are utilized.

Figure 4.4: How often do you get information on TB?



Source: Field Survey 2017

Significantly, a high percentage of 80% of the respondents would receive information on TB on a monthly and yearly basis while a 6% of our respondents would receive the information on a daily basis. This shows that information on TB is available for most of Mghange Dawida villagers.

The study went further to investigate the number of times the villagers of Mghange Dawida sought information from Community Health Workers. This is significant to the study to understand whether the CHWs are accessible to the villagers for information related to TB. The findings are as detailed in table 4.10.

Table 4.10: Number of times the villagers sought information from CHWs

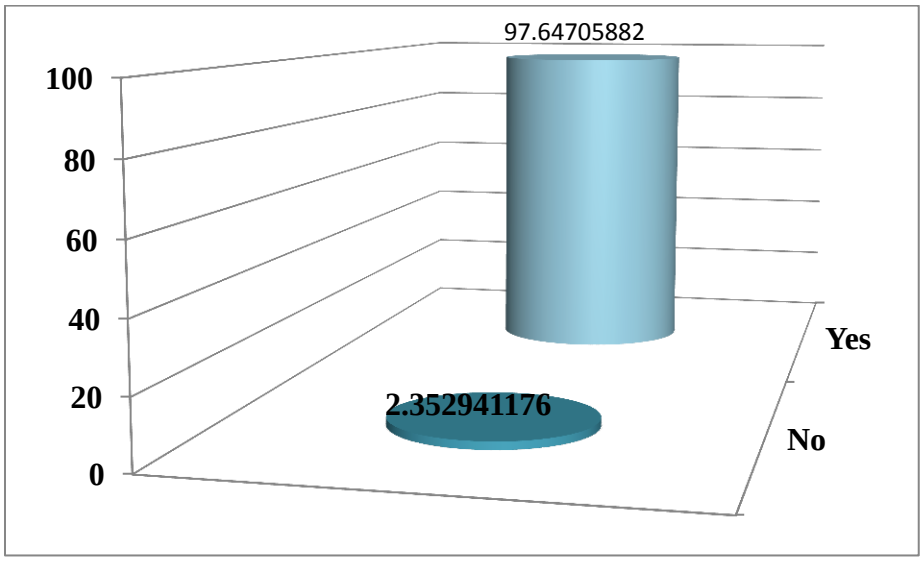
	Frequencies	**Percentage Distributions (%)**
Twice a year or more	1	10
Once in the past 5 years	1	10
Never in past 5 years	5	50
Others	3	30
Total	**10**	**100**

Source: Field Survey 2017

The CHWs stated that irrespective of them visiting households and holding barazas to educate the villagers, the villagers hardly made contact with them where they sought to know more about tuberculosis or even to simply ask questions on the matter. In table 4.10 (b), 50% of the CHWs had never been contacted by the villagers for the last five years, whereas 10% had been contacted only once in the last 5 years; a significant number of 30% CHWs said they were contacted by the villagers monthly and some daily.

The researcher found it necessary to know from the respondents if they wished they could get more information on Tuberculosis. This was important to the study as it shows why the villagers of Mghange would want to have more information on TB. The findings are detailed on figure 4.5.

Figure 4.5: Do you wish you could get more information?



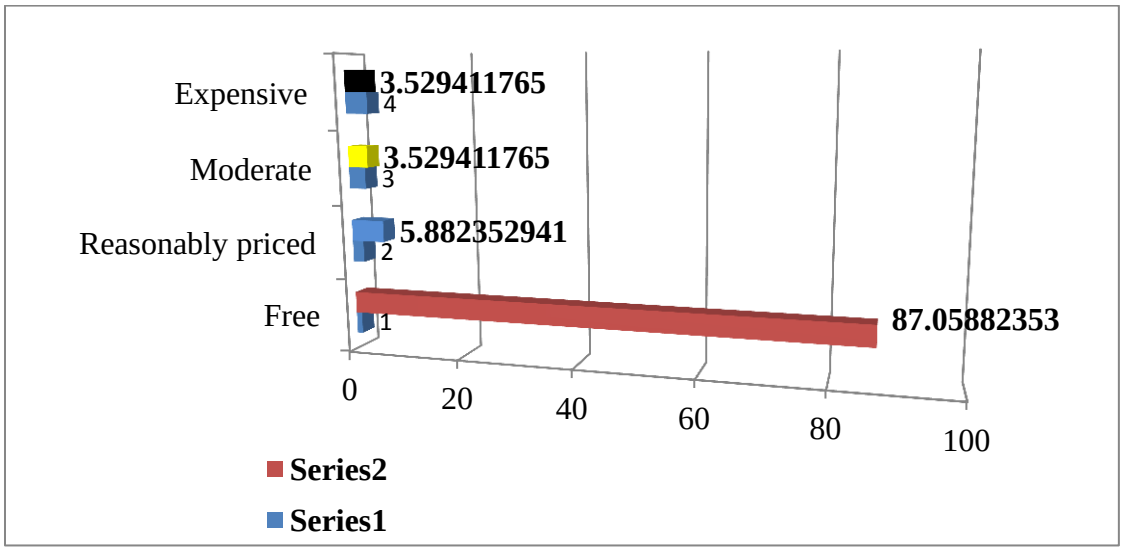
Source: Field Survey 2017

98% said they would appreciate clear and detailed information since they felt there was a lot of myth and assumptions surrounding knowledge on Tuberculosis. A small fraction of the respondents (2%) showed no interested of wanting to receive more information in relation to TB. The respondents were interested in getting more information for enhanced awareness on TB in general, knowledge on treatment regime and what the government is doing on TB.

4.3.4 Access to Governmental communication interventions

The study sought to find out how the access to governmental communication interventions towards the prevention of TB in Mghange Dawida village in Taita Taveta County is. The findings are detailed in figure 4.6.

Figure 4.6: How expensive is it to access governmental interventions?



Source: Field Survey 2017

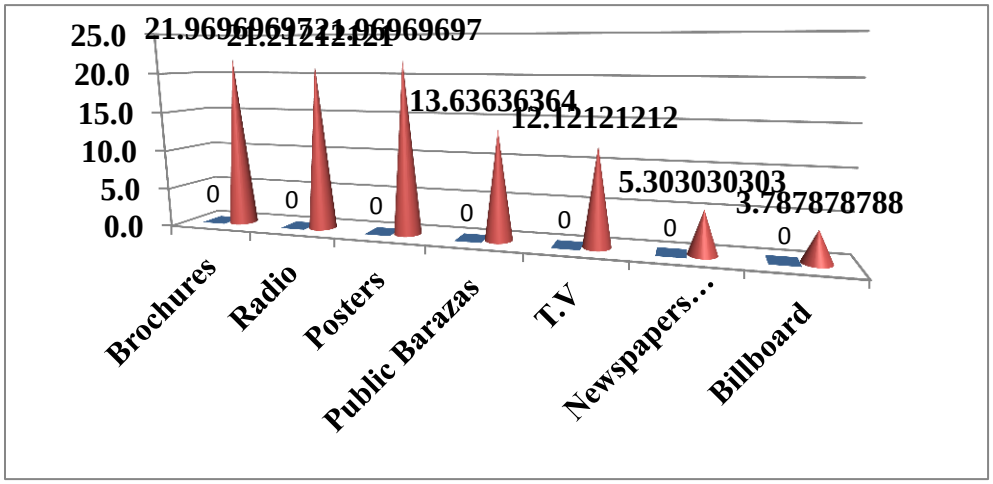
The respondents were asked how much money they spend in accessing these governmental interventions used towards TB prevention. 3.5% said that accessing governmental interventions are expensive and another 3.5% found them moderately expensive in monetary terms. This included the amount of money they require to get to the health centers and buying batteries for the radios. A significant finding indicates that 87.1% of the respondents said they could easily access these governmental interventions such as brochures, posters, radio adverts. This is further supported by the 90% CHWs who said accessing the information is absolutely free of charge to any person living in Mghange Dawida village in Taita Taveta County.

4.3.5 Communication interventions used towards TB prevention in Mghange Dawida in Taita Taveta County

The study sought to find out the communication interventions used towards TB prevention in Mghange Dawida village in Taita Taveta County. This is of significance to the study in

understanding the channels used by the government towards the prevention of TB. The findings are detailed in figure 4.7.

Figure 4.7: Communication interventions used towards TB prevention

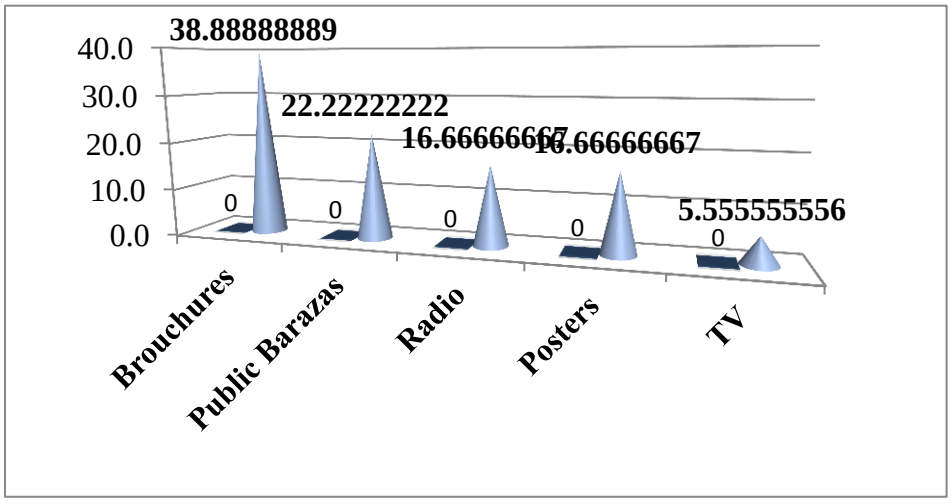


Source: Field Survey 2017

The most common forms of communication interventions used in the prevention of TB in Mghange Dawida in Taita Taveta County are Brochures and Posters both at a 22% response rate. This was closely followed by the use of Radio with 21.2% response rate; whereas, Public Barazas, TV, Newspapers, Magazines and Billboards were at 13.6%, 12.1%, 5.3% and 3.8% respectively. Brochures and Posters were common forms of communication because whenever the respondents visited the health cares, the brochures were easily available to them. The brochures are both pictorial and written in Kiswahili and English. Posters are easily seen in the health care centres, hospitals and even on the streets. This helps the villagers get information on TB without asking many questions to the health workers. The respondents deemed it personal. The Radio was also mentioned as very common because most of the homesteads owned a radio and the local language station 'Anguo FM' airs adverts related to TB and other infections.

However, the respondents also identified other forms of communication interventions used in educating the community on TB preventions. They include, door to door campaigns and Community Health Volunteers organized trainings and workshops. The study further sought to find out which of the listed communication interventions did the Government of Kenya used for combating TB in Mghange Dawida in Taita Taveta County and in Kenya. The respondents identified radio: billboards, TV, community barazas, posters, using community health volunteers to create awareness, newspapers & magazines, door to door campaigns and free medical camps as detailed in figure 4.8.

Figure 4.8: Communication interventions used by CHWs



Source: Field Survey 2017

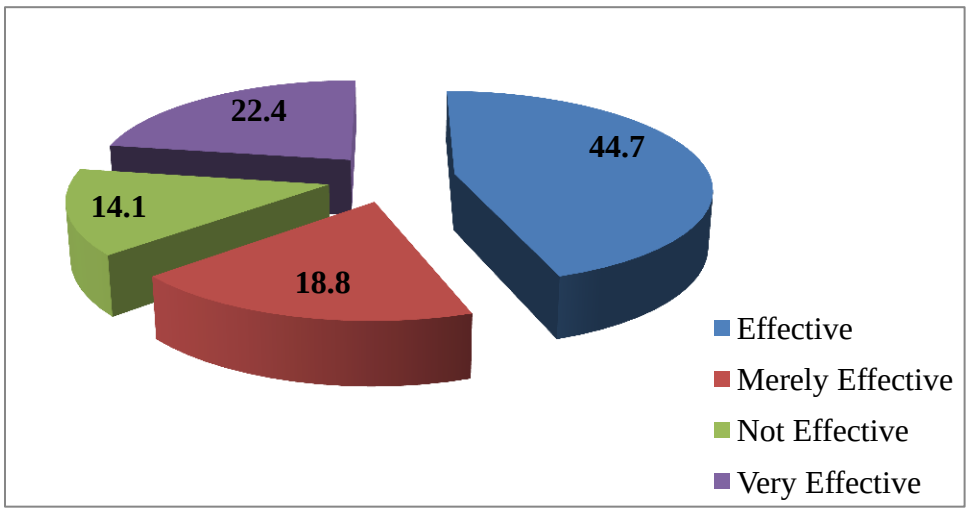
The details in the figure 4.8 indicate that 38.9% of CHWs used brochures to educate the villagers on TB preventions. This finding correlates to what the villagers noted is used as the main communication intervention in Mghange Dawida village in Taita Taveta County. Other communication channels which were used include: public baraza 22.2%, posters 16.7%, radio 16.7% and finally TV 5.6%. The advantages of using brochures by the CHWs was the fact that they could disseminate the information in the local language; kidawida for the villagers. This

means more people both literate and illiterate could understand the messages. The villagers believed and trusted the CHWs interpretations of the messages on the brochures. Public barazas are mainly attended by males in the county as the females mentioned during the day they are busy with the household chores. The Radio is able to reach a large mass in a short period of time.

4.3.6 Effectiveness of the Government interventions on the prevention of TB

Of the identified Government's communication interventions identified our respondents, we opted to further investigate the levels of effectiveness of these communication interventions. This is necessary for purposes of generating weighted empirical evidence of these communication interventions to policy interventions in future and directions of investment on Media interventions in future.

Figure 4.9: How effective are the governmental intervention?



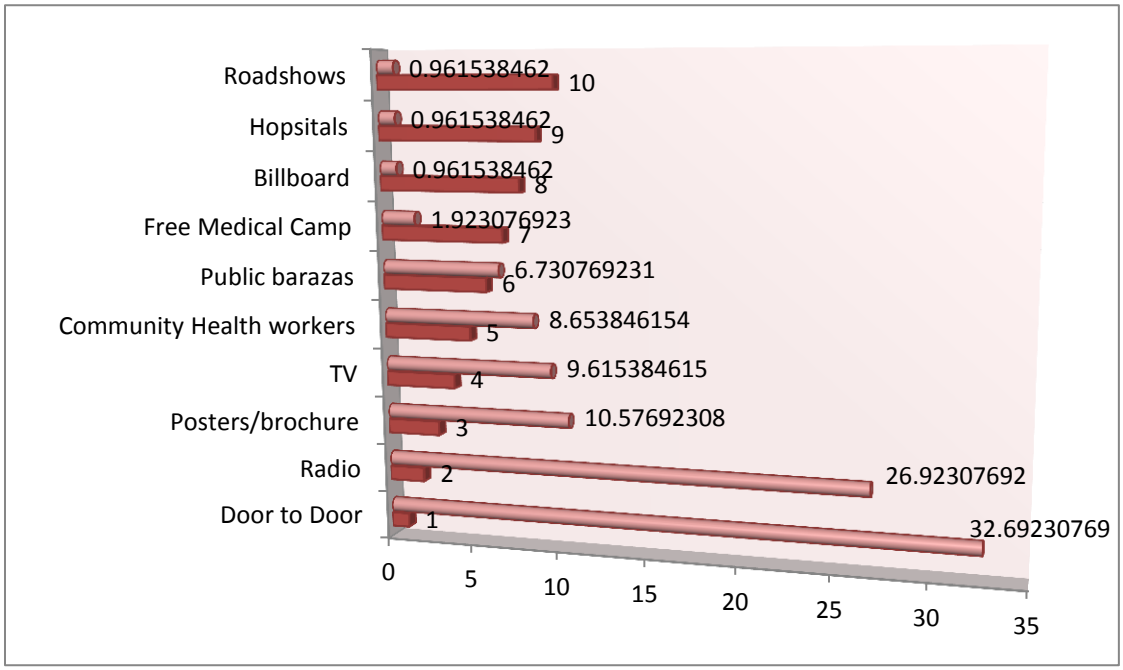
Source: Field Survey 2017

The effectiveness of these governmental interventions was measured against four parameters, that is, "*Very effective", Effective", Merely effective"* and *"Not Effective"*. Thus a significant number of 44.7% of our respondents said that government communication interventions were effective while 22.4% rated them as very effective and 18.8% rated them as merely effective. But

a large number of 14.1% rated that as not effective. This is a cause of worry for the government who need to evaluate all her forms of failures in their communication models and address the shortcomings.

The study sought to find out the most trusted form of communication intervention from the channels of communication the respondents mentioned. The results are detailed in figure 4.10.

Figure 4.10: Most trusted form of Communication interventions



Source: Field Survey 2017

The door to door campaign was rated by our respondents as the most trusted communication intervention with 33% response rate. The door to door campaigns involved direct contact with the respondents and were much preferred because; more people will be reached and would be sensitized on TB preventions. Similarly, most of the respondents are able to ask questions and there would be no excuse for those who have no time to search for information since it will be brought at their door steps. This was followed by the use of radio with 27% response rate. The second most preferred form of communication intervention was the radio. The radio was more

preferred after door to door campaigns for the following reasons; first, because many people had and may as well afford a radio. Therefore, a large number and range of people in the community would get to be educated on TB through radio which gave elaborate and detailed information on TB. The three forms of communication interventions identified by the respondents that were not listed in the survey; they included the use of roadshows, hospitals and holding free medical camps. The least trusted forms of communication intervention were the use of billboards with a 1% response rate. This shows that the use of billboard may not be as effective as it should be in terms of communicating to the community on TB prevention. This is because the billboards are mostly erected in the bigger towns like Voi and Mwatate yet most of the villagers are based in Mghange Dawida with minimal movement to the said towns.

4.4 Messages conveyed during TB prevention campaigns

In an attempt to assess the extent to which the message conveyed to the respondents through the various communication channels, the study sought to establish the kind of messages conveyed during the campaigns. The empirical evidence generated included the following interpretations. For instance, the majority understood that TB is curable and if one gets a persistent cough, after 2 weeks he/she should visit the nearest clinic or government hospital for TB screening which they also know is done free of any charges. At the same time, many understand that TB is airborne so proper ventilation should be maintained especially in crowded places since everyone is vulnerable irrespective of age. Similarly, the critical awareness among the people of the medical difference between TB and AIDS (Acquired Immune Deficiency Syndrome). Furthermore, other significant levels of awareness that people tend to know that smoking cigarettes can cause TB and the knowledge regarding the importance of cleanliness and the fact

that those confirmed to have TB should be on medication. Since 'Prevention is better than cure' understood in the context that sharing of utensils like cups and spoons can lead to spread of TB.

4.5 Credibility of TB information received

The study went ahead to find out how credible the information on TB was. How credible information is influences the rate at which TB is prevented. Getting the right information helps individuals seek the right treatment and take treatment when need be. The findings on the credibility of TB information in Mghange Dawida village in Taita Taveta Country are detailed on table 4.11.

Table 4.11: Credibility of TB information received

	Frequencies	**Percentage distributions (%)**
No	11	13
Yes	66	77.6
Don't Know	8	9.4
Total	**85**	**100**

Source: Field Survey 2017

A total of 77.6% of the respondents considered the information they have been receiving concerning TB prevention campaign adequate and credible as detailed in Table 4.10. The credibility of the information can be based on the source of the materials used to educate/training. The CHWs got their materials from clinics and government institutions like Kenya medical research institute (KEMRI). This then showed that a majority got enough and credible information from the campaigners that contribute to the behavior change. 13% of the respondents considered the information not credible. This is mostly because some of them believed that the information was outdated. 9.4% did not know whether the information was credible.

4.6 TB related concerns

This section compiles views from the respondents on what worries them most concerning Tuberculosis (TB). Most respondents are concerned about how TB is airborne and can be transmitted easily and fast yet the houses they live in are not fit to stop the spread of TB. Similarly, a number of respondents were worried about how high the numbers of deaths related to TB are. Most believe that TB kills many and not everyone with TB gets well. There is a thin line between TB and HIV/AIDS. It's assumed if you have TB chances are you have HIV/AIDS thus stigmatization by neighbors or the community. Furthermore, many individuals with Tuberculosis (TB) resist taking medication or go for TB screening. This increases the chances of spreading the disease to a greater number. The respondents noted that once one is diagnosed with TB, it takes a long time and a series of screening before it actually clears out.

In addition, the fear that the information on TB prevention may not reach everyone and that a serious cough maybe misdiagnosed as just a normal cough was observed. Finally, misconceptions and myths on the spread and transmission of TB lead to fear of being isolated by the villagers if one is infected with TB. Some of the misconceptions in the village included that someone who has TB is bewitched and therefore must not interact with anyone but should be left to die. The most common misconception was the one that related TB with HIV/AIDS. Most of the respondents mentioned that anyone who has TB is deemed to have AIDs and therefore stigmatized and as a result chooses not to seek treatment for fear of judgement and isolation.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Overview

This chapter presents the summary of this project. It highlights the key points in the study captured under summary of findings, conclusions and recommendations. Health literacy is a challenge worldwide and Kenya is no exception. Health of many individuals in any given society may be at risk because of different kinds of reasons from time to time. For example, health information received from the media may in turn have adverse impacts on health outcomes and the entire health care system in a country (Owoseni, 2014). In an attempt to understand the Impacts of Government's Communications Interventions on the prevention of Tuberculosis (TB) in Mghange Dawida, Taita Taveta, the researcher developed questionnaires as part of the research tools to generate such information from the field and augemented this by key informants interviews and relevant information from libraries and the Internet.

This chapter thus deals with a number of conclusions based on the findings which seeks to understand the various communication channels used by the Government of Kenya in the prevention of TB in Mghange Dawida Village in Taita Taveta County and to assess the impacts and the effectiveness of the communication mechanisms used in the prevention of TB Mghange Dawida Village in Taita Taveta County.

5.2 Summary of the findings

The broad objective of this study was to examine the impacts of communication interventions in the prevention of Tuberculosis (TB) in Mghange Dawida village. The study sought to identify the different communication interventions used by the Government towards the prevention of TB in Mghange Dawida and how effective these interventions were towards the prevention of TB. In addition, the study sought to examine whether these communication channels used by the

government have made an impact in Mghange Dawida village in specific towards the prevention of TB.

The study sought to answer three key research questions: 1) What are the channels and types of communication used by the government for the prevention of TB in Mghange Dawida Village?, 2) What are the impacts of the government's communication interventions in Mghange Dawida Village? 3) How effective are the government's communication interventions used towards prevention of TB in Mghange Dawida village?

In reaching to the findings as discussed, the researcher was cognizant of the observations made by the Health Belief Model and the Two Step Flow Theory on how attitudes and beliefs influence behavior and how information flows from the media to the people respectively.

As earlier stated in the theories section, there are many factors that can influence the consumption and use of communication interventions behaviors. In the case of Mghange Dawida villagers, different factors influenced their choice of preferred communication intervention; literacy level, accessibility and income. The study found out that the government uses the following communication channels in its communication on matters TB in Mghange Dawida village: Posters, Brochures, Mass media; TV and Radio, Door to Door campaigns, billboards, newspapers and community barazas. The study also found out that the most common communication interventions used in Mghange Dawida, Taita Taveta were brochures, radio and posters. In addition, our study found out that a majority of the villagers, totaling 84.7% of our respondents, are aware of the types of communication channels used by the government towards prevention of TB. The study went further and found out that as much as the villagers of Mghange Dawida are aware of the various channels of communication used by the government, they did have a preference; radio and door to door campaigns. It can be concluded that interpersonal communication is more effective in persuasion and behaviour change as opposed to

mass mediated messages which are more effective in raising people awareness about public issues (Hornik, 1988).So it was not a surprise that the most preferred communication intervention was the door to door campaign with a 33% response rate .Door to door was much preferred because of the one on one discussion where respondents were able to ask questions, the method also would reach a larger number of people because of the movement from one household to another. For the radio it was noted that a large number of household had and listen to radios more often and they found communication on TB done through the radio was more informative and elaborate.

The study found out that the communication interventions used by the government are effective and therefore have created impact over time on TB preventions. The findings showed that the communication interventions were effective with a 67.1% response rate, with the most effective one being the use of brochure (52.6%). This is also supported by reports on reduction rates of TB in Mghange Dawida village. This gives a clear indication that the TB messages conveyed to the villagers were understood and resulted in change behavior of the villagers of Mghange Dawida village. The study revealed that some villagers sought medical attention after messages on TB being curable. A majority understood that TB is curable and if one gets a persistent cough, after 2 weeks should visit the nearest clinic or government hospital for TB screening which is free.

The study revealed that some of the measures that needed to be taken to make the communication interventions more effective was to use the Kidawida language in the communication of TB messages. It also revealed that the villagers of Mghange Dawida were keen on getting information on TB more regularly. 98% of our respondents said they would appreciate clear and detailed information since they felt there was a lot of myth and assumptions surrounding knowledge on TB. This can be concluded that the government needs to increase the

frequency of transmitting messages related to TB. Some of the respondents felt that Polio has many campaigns and they felt that TB should have the same frequency.

5.3 Conclusions

The research sought to analyse the impact of government's communication interventions on the prevention of tuberculosis (TB). Based on the findings of this study it can be concluded that indeed the government communication interventions towards the prevention of TB in Mghange Dawida have had a positive impact in the village.

From the data gathered and analysed, it was evident that there was a relationship between the channels of communication used to disseminate messages on TB and prevention of TB among the villagers. The villagers of Mghange Dawida preferred anonymity and face to face interactions to avoid disclosing their identity. With the radio, anonymity is maintained for a speaker not willing to disclose their identity. (Harry H. & Caroline W., 2007). Radio as a form of media channel thus, when frequently used by the society can be a good platform to interview TB patients and health promoters towards raising awareness on tuberculosis.

Further, based on the findings presented it shows that the communication interventions used by the government towards prevention of TB have a positive impact on the villagers of Mghange Dawida. The communications have contributed in the villagers visiting health centres/hospitals when they have a cough that lasts more than 2 weeks. It is also important to point out that the study established that there is still a significant percentage of villagers who do not visit health centers for TB diagnosis due to myths and superstitions associated with TB.

5.4 Recommendations

From the study some issues have come up that have informed part of our study's recommendations. For instance, this study found out that radio was among the most preferred communication channel among the residents of Mghange Dawida in Taita Taveta County.

Therefore, the government could provide adequate, detailed information on TB by maximizing the most commonly used communication channel which is the radio.

Furthermore, most of the villagers speak Kidawida language. This means the communication messages could be easily transmitted to all the villagers if messages were translated to Kidawida language, this is notwithstanding the fact that some respondents raised concerns that they are not able to read the brochures since they are either in English or Swahili. The study therefore recommends that more campaigns on TB prevention using Kiswahili and English and translated into Kidawida be undertaken. Such more will thus concur with the views of some respondents who said that, they should be an increase on the number of TB campaigns just like those for Polio Vaccine. This would definitely increase awareness levels on TB and the abolitions of the myths that wrongly tend to perpetrate the wrong myth of correlations relating to having TB with HIV.

An important extension of this study is to replicate this research to other areas outside Taita Taveta County. This is important as such studies will contribute towards the fight against Tuberculosis in the country.

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ANNEX 1(a): QUESTIONNAIRE FOR THE MGHANGE DAWIDA VILLAGERS

INSTRUCTIONS

Do not write your name on this questionnaire.

The questionnaire will be administered by Research Assistant who shall maintain top confidentiality.

The respondent shall be at liberty to answer or not to answer any question.

Research Assistant will explain the question to the respondent incase its' not well understood.

SECTION A: DEMOGRAPHICS

Respondent's sex

Male [ ] Female [ ]

Respondent's age

18 – 25 years [ ] 42 - 49 years [ ]

26 - 33 years [ ] Above 50 years [ ]

34 – 41 years [ ]

Marital Status

Single [ ] Married [ ]

Divorced [ ] Widow [ ]

What is the highest level of education that you have attained?

[ ] Never been to school

[ ] No formal Education but can read and write

[ ] Primary education

[ ] Secondary

[ ] Diploma level

[ ] University Level

[ ] Other (Specify) _____

What do you do for a living?

[ ] Casual worker

[ ] Unemployed

[ ] Housewife

[ ] Professional/works in an office

[ ] Farmer

[ ] Businessman

[ ] Other (Specify) _____

What is your income mode?

[ ] Daily

[ ] Weekly

[ ] Monthly

How far do you live from the nearest health clinic or hospital?

[ ] 0–10 kilometers

[ ] 11–20 kilometers

[ ] 21–30 kilometers

[ ] More than 30 kilometers

SECTION B: TB AWARENESS AND SOURCE OF INFORMATION

Are you aware of the Prevention campaign strategy in fighting TB in Kenya?

Yes [ ] No [ ]

Where did you first learn about tuberculosis or TB? (you can check all that apply)

[ ] Newspapers and magazines

[ ] Health workers

[ ] Religious leaders

[ ] Teachers

[ ] TV

[ ] Billboards

[ ] Family, friends, neighbors & colleagues [ ] Radio

[ ] Brochures, posters & other printed materials

[ ] Others (Specify) _____

a) Do you get any information related to TB prevention?

Yes [ ] No [ ]

b) If yes, how often to do you get the information?

[ ] Daily [ ] Weekly

[ ] Monthly [ ] Yearly

Doyouwishyoucouldgetmoreinformationabout TB?

Yes [ ] No [ ]

How expensive do you think it is to access this governmental intervention in your village?

(Please check one)

[ ] It is free of charge

[ ] It is reasonably priced

[ ] It is somewhat/moderately expensive

[ ] It is very expensive

a) Which communication interventions are being used in your village towards TB prevention?

[ ] Brochures

[ ] Radio

[ ] Posters

[ ] Public Barazas

[ ] Newspapers and magazines

[ ] TV

[ ] Billboards

[ ] Other (explain) _____

b) Which of the above is the government using in conveying its message on TB prevention in your village (if others, kindly state)?

_____

_____

c) How effective are these government's communication intervention?

Very effective [ ] Effective [ ] Merely effective [ ] Not effective [ ]

Which communication intervention do you trust most and why?

_____

_____

Do you recall the messages they conveyed to you? Please explain your answer

_____

_____

Do you consider the information you received in the messages you mentioned adequate?

Yes [ ] No [ ] Don't know [ ]

Do you consider the information you received in the messages you mentioned credible?

Yes [ ] No [ ] Don't know [ ]

What worries you the most when you think about TB?

_____

_____

_____

In your opinion, what would you say can be done to enhance the effectiveness of the government communication intervention used in your village?

_____

_____

_____

_____

Thank you very much for your time and cooperation.

EDITH KALELA

Tel: 0726 179 948

E-mail: ekalela24@gmail.com

ANNEX1(b): QUESTIONNAIRE FOR COMMUNITY HEALTH WORKERS

INSTRUCTIONS

Do not write your name on this questionnaire.

The questionnaire will be administered by Research Assistant who shall maintain top confidentiality.

The respondent shall be at liberty to answer or not to answer any question.

Research Assistant will explain the question to the respondent incase its' not well understood.

CHW= Community Health Worker

SECTION A: DEMOGRAPHICS

Respondent's sex

Male [ ]

Female [ ]

Respondent's age

18 – 25 years [ ]

26 - 33 years [ ]

34 – 41 years [ ]

42 - 49 years [ ]

Above 50 years [ ]

What is your current marital status?

Unmarried [ ]

Married [ ]

Divorced [ ]

Separated [ ]

Widowed [ ]

Respondent's level of education

Primary education [ ]

Secondary [ ]

Diploma level [ ]

University Level [ ]

Other (Specify) _____

SECTION B: CHWs DETAILS

What is your level of health profession education? _____

Respondent job title/type of employment

Medical Officer	[ ]	Administrative Staff	[ ]
Medical Licensee	[ ]	Laboratory Staff	[ ]
Nurse/Clinical Officer	[ ]	Treatment Supporter	[ ]
Pharmacy Staff	[ ]	Environmental Health Technologist	[ ]

Others (Specify) _____

How long have you been working in this current position?

[ ] 1 year and below

[ ] 2 – 5 years

[ ] 6 – 9 years

[ ] 10 – 13 years

[ ] 13 years and above

Did you have direct contact with TB patient in the last year?

[ ] Yes, in own household [ ] No

[ ] Yes, outside household [ ] Don not Know

[ ] Yes, in healthcare facility

a) Did you ever use medication to prevent you from developing TB, such as isoniazid prevention therapy?

Yes [ ] No [ ] Unknown [ ]

If yes

b) In which year did you take IPT? _____

c) Duration of treatment _____ (weeks/months)

SECTION C: COMMUNICATION INTERVENTION TOWARDS TB PREVENTION

a) Have you ever provided education to these villagers on communication interventions they can used to access information on TB prevention?

Yes [ ] No [ ]

If so, how often do you provide this information? _____

a) What materials do you use to guide your education sessions?

_____

b) What is the source of the materials you use for TB education?

_____

a) In the past 12 months, have you attended a seminar/workshop on tuberculosis (TB)?

Yes [ ] No [ ]

b) If yes, were you trained on any communication intervention that you can use to disseminate the information to the villagers?

Yes [ ] No [ ]

b) If yes, kindly list these communication interventions

_____

_____

What communication intervention do you use as a (Community Health Worker) CHW to educate on TB prevention practices in your village?

[ ] Brochures [ ] Other (explain) _____

[ ] Radio

[ ] Posters

[ ] Public Barazas

[ ] Newspapers and magazines

[ ] TV

[ ] Billboards

In your opinion, to what extent are the following government's communication interventions effective in educating the villagers on TB prevention?

(5 Very high extent, 4 High extent, 3 Neutral, 2 Low extent, 1 Very Low extent)

Communication Intervention	5	4	3	2	1
Brochures					
Radio					
Posters					
Public Barazas					

Others (Specify) _____

How expensive do you think it is to access this governmental intervention in your village? (Please check one.)

[ ] It is free of charge

[ ] It is reasonably priced

[ ] It is somewhat/moderately expensive

[ ] It is very expensive

How often do the villagers seek you as CHW to provide information on TB prevention?

[ ] Twice a year or more

[ ] Once per year

[ ] Less than once a year but at least twice in past 5 years

[ ] Once in past 5 years

[ ] Never in past 5 years

[ ] Other (Specify) _____

What is your recommendation as a CHW to the government on the choice of communication intervention they use towards effectively educating its citizens on prevention of TB

_____

_____

_____

_____

Thank you very much for your time and cooperation.

EDITH KALELA

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ANNEX 2: KEY INFORMANTS INTERVIEW GUIDE

The interview is aimed to assess the impact of government's communication interventions on the prevention of tuberculosis (TB).

Questions:

1. Do you feel there is need for TB intervention in your community?
2. Are you aware of any government communication intervention towards TB prevention? Which are they?
3. In your view, are there any benefits that can be derived from using government's communication interventions towards TB prevention?
4. Are these communication interventions trickling down to the common 'mwananchi' in your county?
5. Are there any cultural barriers (including religious) that could have affected the communication interventions used by the government?
6. In your own opinion, have any of these communication interventions been effective so far?
7. What do you propose the government should do towards improvement of the communication interventions used in TB prevention?
8. Any other comment/recommendation on government's communication intervention used towards prevention of TB?

ANNEX 3: CERTIFICATE OF FIELD WORK

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This is to certify that all corrections proposed at the Board of Examiners meeting held on 11/07/2017 in respect of M.A/PhD. Project/Thesis Proposal defence have been effected to my/our satisfaction and the project can be allowed to proceed for fieldwork.

Reg. No: K50/79800/2012

Name: EDITH KALELA

Title: THE IMPACTS OF GOVERNMENT'S COMMUNICATION INTERVENTIONS TOWARDS THE PREVENTION OF TUBERCULOSIS IN KENYA - THE CASE STUDY OF MGHANGE DAWIDA VILLAGE IN TAITA TAVETA COUNTY

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Name: EDITH KALELA

Title: THE IMPACT OF GOVERNMENT'S COMMUNICATION INTERVENTIONS ON THE PREVENTION OF TUBERCULOSIS (TB) IN KENYA. THE CASE STUDY OF MGHANGE DAWIDA VILLAGE IN TAITA TAVETA COUNTY

SUPERVISOR	SIGNATURE	DATE
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ASSOCIATE DIRECTOR	SIGNATURE	DATE
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