THE CONTRIBUTION, COMPETENCY AND LESSONS LEARNED FROM COMMUNITY HEALTH WORKERS DURING EMERGENCIES IN KIGAMBONI DISTRICT, TANZANIA

MARIA SALATIEL KAYOMBO

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF HUMANITARIAN ACTION, COOPERATION AND DEVELOPMENT

DEPARTMENT OF POLITICAL SCIENCE, PUBLIC ADMINISTRATION, HISTORY AND PHILOSOPHY

THE OPEN UNIVERSITY OF TANZANIA

2023

CERTIFICATION

The undersigned certifies that he has read and hereby recommends for acceptance by the Open University of Tanzania a dissertation titled: **"The Contribution, Competency and Lessons Learned from Community Health Workers During Emergencies in Kigamboni District Tanzania".** In partial fulfillment of the requirements for the degree of Master of Humanitarian Action, Cooperation and Development of the Open University of Tanzania

……

Dr. Jacob Lisakafu

(Supervisor)

……..

Date

COPYRIGHT

DECLARATION

I, **Maria Salatiel Kayombo** declare that the work presented in this dissertation is original. It has never been presented to any other university or institution. Where other people have been provided. It's in this regard that I declare this work as originally mine. It is hereby presented in partial fulfillment of the requirements for the award of the degree of Master of Humanitarian Action, Cooperation and Development of The Open University of Tanzania.

…….

Signature

……

Date

DEDICATION

This study work is dedicated to my late father Salatiel Francis Kayombo, mother Prisca Thomas Haule, beloved twin sister Agnes Salatiel Kayombo and dearest son Fredrick Peter Kayombo. Lastly my dedication is to the family at large, friends and all those who wished me best of luck, encouragement and support while conducting the study.

ACKNOWLEDGMENT

First, I thank the Almighty God for being with me during the entire period of my study. Secondly, I'm grateful to my family and friends for their support and encouragement. Thirdly, I'm thankful to the Kigamboni Municipal Council and respective Ward Executives Officers, Extension Officers and Community Health Workers for allowing me to conduct this study in their locality.

I equally acknowledge the tireless contribution of my first supervisor, the late Professor Emmanuel Kigadye for his tireless guidance, support and cooperation. I equally appreciate the support and guidance of Dr. Jacob Lisakafu who took over after the untimely death of Prof. Kigadje. Likewise, I extend my appreciation to my Research Assistants - Ms. Emiliana Costantino Mtweve and Mr. Peter Peter Keasi for their support and assistance in conducting the study.

I'm very indebted to the Konrad Adenauer Stiftung (KAS) Tanzania Country Office for sponsoring the study. Since it is impossible to name each and every one, I would like to thank all of them knowingly that their inputs and encouragement were of great importance in the accomplishment of this study. Lastly, I wish to acknowledge the contribution of various scholars and researchers who their work has been quoted in this report for their inputs.

ABSTRACT

The contribution of Community Health Workers (CHWs) in Tanzania during emergency situations is well documented (URT 2004, Keith 2015, WHO 2010, 2019, PO-RALG 2021). However, concerns over their preparedness, competence, availability of resources and the quality-of-care services rendered remain a major public concern. This study sought to assess their contributions specifically, to evaluate their knowledge and skills and to identify lessons learned to strengthen resilience on issues related to emergency responses and replicating it elsewhere. Equally questionnaire, literature review, structured interviews methods applied in data collection. The study reveals their contributions cannot be underestimated. Above average of respondents expressed their appreciation of CHWs work in responding to emergency situations. Also, the findings reveal shortcomings that need intervention including shortage of working tools, financial and material support, low motivation, education and even competence among CHWs. The study is significant since it exposed their challenges experienced and suggest possible solutions including collective action to advocate for change in improving working environment and capacity building. The government in specific need to allocate funds and reduce dependency while community needs to understand and support and their contribution in times of emergency through public awareness programs. Finally, research results revealed gaps that need to be worked upon when it comes to competence and resilience issues despite the good work done by CHWs in supporting government initiatives on health at the community level.

Keywords: *Community Health Workers, contributions, competency and lesson leant.*

TABLE OF CONTENT

LIST OF TABLES

FIGURE

LIST OF ABBREVIATIONS

ATM	AIDS/HIV, Tuberculosis and Malaria
AU	African Union
CBHCP	Community Based Health Care Program
CBHS	Community Based Health Service
CBO	Community Based Organization
CD	Community Development
CHA	Community Health Assistant
CHEWs	Community Health Extension Workers
CHSS	Community Health Services Supervisor
CHV	Community Health Volunteer
CHW	Community Health Worker
COVID 19	Corona Virus Diseases 2019
CTC	Care and Treatment Centre
DHS	Demographic Health Survey
DMO	District Medical Officer
GHWA	Global Health Workforce Alliance
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
HRH	Human Resource for Health
HSA	Health Surveillance Assistant
KAS	Konrad-Adenauer-Stiftung
KMC	Kigamboni Municipal Council
LGA	Local Government Authority

MDG	Millennium Development Goal
MDGNMS	Millennium Development Goals Monitoring Survey
MMDGNMS	Madagascar Millennium Development Goals National Monitoring Survey
MoH	Ministry of Health
MoHCDGEC	Ministry of Health, Community Development Gender Elderly and Children
NBS	National Bureau of Statistics
NEHIP	National Essential Heath Intervention Package
NGO	Non - Government Organization
OPD	Out Patient Department
OUT	Open University of Tanzania
PHC	Primary Health Care
PLHIV	People Living with HIV
PO-RALG	President Office, Regional Administration and local Government
PPE	Personal Protective Equipment
RCH	Reproductive and Child Health
RMNCH	Reproductive health, Maternal, New born and Child Health
RMO	Regional Medical Officer
SDG	Sustainable Development Goal
SPSS	Statistical Package for Social Scientists
TAMISEMI	*Tawala za Mikoa na Serikali za Mitaa*
TB	Tuberculosis
UHC	Universal Health coverage

UN	United Nation
UNFPA	United Nation Population Fund
URT	United Republic of Tanzania
WAJA	*Wahudumu wa Afya Ngazi ya Jamii*
WEO	Ward Executive Officer
WHO	World Health Organization.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This study is geared to capture lessons that can be learn in responding to emergency situations based on the work of Community Health Workers (CHWs) in Kigamboni district as case study. The focus is on assessing the contribution of CHWs during emergency in the district; and specifically, to evaluate their knowledge and skills in dealing with an emergency in the study area, and to identify lessons that can learnt so as to strengthen resilience on issues related to emergency matters. Issues of CHWs' competence, working tools and motivations, quality of care service, financial and other resources together with forms of support received from stakeholders and their types are appraised in order to understand the role of CHWs in emergence situations. The introductory chapter consists of background information on the study, statement of the problem, objective of the study, research questions, significance of the research, justification, organization of the study and scope of the study.

1.2 Background of the Study

The concept of using community members to render basic health services to their communities has a long history. This could be traced way back to late 1800s in Russia when that country used community members to assist physicians to provide primary health care in villages with limited doctors. They named them *Feldhsers* upon completing special training for their assignments. In China, similar trained community members were called *Barefoot Doctors.* They were tasked to record births and

deaths, vaccinating people against smallpox and other diseases, administering first aid, giving health education, and helping communities to keep water wells clean (Perry, 2013).

The work of Community Health Workers (CHWs) is equally recognized globally by the World Health Organization (WHO) as a vital element in primary health care coverage, and consequently, a significant component to achieving universal health coverage (Roby, 2019). WHO values the work of CHWs because they work with governments and development partners; and because the UN agency acknowledged the usefulness of the CHWs it has been supporting their efforts worldwide as they provide critical care to millions of people affected during emergencies and crises including victims of pandemics and wars. The roles CHWs include delivering immediate response, assessing, monitoring risks, and mobilizing communities to respond to a defined situation for their own good and treating common illnesses, promoting good primary health practices, risk reduction, emergency preparedness and helping people recover from disasters (WHO, 2010). Most African countries have insufficient manpower. No wonder the African Union adopted the African Strategy for Health (2016-2030) which underlines the use community-centred health service delivery, because it was the surest way of dealing with challenges faced by African countries with regard to services accessibility (Keith (2015).

Already a number of African member states have used CHWs to provide humanitarian services in emergency-hit areas (ibid). Ebola outbreak in four West African countries (Guinea, Liberia, Nigeria and Sierra Leone) offers a good illustrative example.

Health Ministries in those countries with UNFPA and WHO trained 300 Community Health Workers on how to conduct door-to-door visits to identify people affected and monitored closely the health of people who had exhibited symptoms of Ebola. The symptoms include fever, diarrhoea and vomiting. Data the collected were sent to responsible government officers via given traced mobile phones. These people served as contact tracers at local level (Cole, 2014).

Tanzania has developed and adopted a new National Health Policy 2020. The Policy Guidelines for Community-Based Health Services (CHBS) 2021 falls under the Community-Based Health Care Programme (CBHCP) service package. It consists of activities derived from the National Essential Health Interventions Package (NEHIP). The NEHIP is built on four public health pillars - health promotion, preventive, curative and rehabilitative services. Against this backdrop it is easy for one to understand the importance of using CHWs in order to promote decentralization, community involvement, participation and partnerships for sustainability of the services offered to the community (MoHCDGEC, 2020).

In rural Tanzania, most people have limited access to health and social welfare services. This drawback is explained by prominent health social determinants such as low income, education levels, unhealthy practices and critical shortage of human resources in health and social welfare, particularly at the primary health care level. It is for this reason that the contribution of CHWs is increasingly being recognized as essential to expand access and provision of essential health and social welfare services (MoHCDGE, 2020). CHWs are volunteers from diverse educational and experiential

backgrounds (CBHS, 2021). The operational guideline for CBHS service package is provided in the operational guide (CBHS, 2021). The CHWs have been assigned multiple, overlapping roles and identities. In 2020 they supported provision of primary health care during the outbreak of dengue, HIV/AIDS and cholera. They had also to trace contacts, giving education to the community collection of essential information needed and submit them to relevant authorities (Sikika, 2020).

The National Operational Guideline for community-based health care services, 2020 ensures there is sustainable and resilience health system downward to the local level. The Government has started implementing the programme by identifying and training of CHWs in all regions. CHWs have been used in Dar es Salaam city streets to support the provision of community-based health and social welfare services. Due to an increased and wide spread of this voluntary cadre in the health sector and in humanitarian needs, it was important to know the importance of CHWs in the public health systems. This study was conceived to assess had its focus on assessing the contribution, competency and lessons learnt from the work of Community Health Workers (CHWs) during emergencies in Tanzania with Kigamboni district as case study.

1.3 Statement of the Research Problem

In 2020 the government of Tanzania came up with Policy Guidelines for Community Based Health Service under the Community Based Health Care Program (CBHCP). The Policy Guide is built on four pillars- health promotion, preventive, curative and rehabilitative services. The role of CHW in the implementation of the said policy

cannot be overstated given the critical shortage of manpower in the health sector; and particularly in relation to their number, skills and geographical distribution.

Dar es Salaam, a teeming city of 5.3 million people according to the 2022 National Bureau of Statistics (NBS) data, is a case in point when it comes to shortage in health personnel during outbreak of communicable diseases like cholera, COVID-19, red eyes and dengue for example.

In response the Ministry of Health developed a decentralized and people-centred programme to help the health department and other units at the council level in assisting communities during the outbreak of such calamities. Under the programme, the government uses community-based volunteers better known as Community Health Workers (CHWs) in Swahili are known as *Wahudumu wa Afya Ngazi ya Jamii (WAJA)*. The volunteers are picked from the community. When an emergency occurs, they provide services on voluntary basis under the district health department. Emergence apart, CHWs are required to engage in health promotion, environmental health, hygiene and sanitation, nutrition, social welfare services, to fight against communicable and non-communicable diseases. The mentioned national guideline known clearly stated that there should be two CHWs in each street. The volunteers are selected according to standing guidelines and receive training before they start to work (MoHCDGEC, 2020).

So far, no research study has been taken to appraise the contribution, competency and lessons learned from the work of CHWs during emergencies despite of notable

and good work done. This is the essence of the study. It has focused in assessing the contribution, competency and lessons that could learned from their work in Kigamboni district during emergency situations. The study is critical because if it proves successful, it can be replicated elsewhere. Likewise, in case of challenges solutions will have to be worked out. Equally important the study is necessary for the achievement of the Global Sustainable Development Goals (SDGs).

1.4 Research Objectives

1.4.1 Main Objective

The main objective of the study was to assess the contribution, competency and lessons learned from Community Health Workers (CHWs) during emergencies Kigamboni district, Tanzania.

1.4.2 Specific Objectives

i) To assess the contribution of CHWs during emergencies in the study area;

ii) To evaluate the knowledge and skills of CHWs in dealing with an emergency in the study area; and

iii) To identify lessons learned so as to strengthen resilience on issues related to emergency.

1.5 Research Questions

i) What is the contribution of CHWs during emergencies in Tanzania?

ii) Do CHWs have the required knowledge and skills to deal with emergencies cases?

iii) What lessons can be learned from CHWs when it comes to strengthening resilience issues related to emergency?

1.6 Significance of the Dissertation Report

The study is significant since it brings to public light the contribution, competency and lessons that can be learned from the work of Community Health Workers (CHWs) during emergencies. It is equally significant in that it enables the community to recognize and value the CHWs and their roles in the community; especially during emergencies. Furthermore: To decision and policy makers, government officials and other actors to support this cadre not only by allocating resources but by also highlighting lessons learned and to amplify the efforts needed to strengthen resilience; To academicians, this report will add more reference and literature that will open up for more research and publications writings on emergency and CHWs issues while community at large, this report will intensify their understanding and rationale of this cadre in health sector and at emergencies.

1.7 Scope of the Dissertation

The study was confined in Kigamboni District within Dar es Salaam Region. Dar es Salaam is Tanzania's largest city and commercial hub with a population of 5.3 million people (NBS 2022 data). It has five districts and that have been designated municipalities - Ilala, Kinondoni, Temeke, Kigamboni and Ubungo. The findings of this study were confined to the contribution of CHWs during emergencies; and specifically, on the experience of Mjimwema, Tungi, Kibada and Kisarawe II Wards in Kigamboni District.

1.8 Organization of the Dissertation Report

As mentioned in the outset, this study focusses in assessing the contribution, compe tency and lessons learned from Community Health Workers (CHWs) during emergencies in Tanzania with special focus on their contribution, evaluate the knowledge and skills of CHWs in dealing with an emergency and identifying lessons learned so as to strengthen resilience on issues related to emergency as explored in six chapters of this study report. *Chapter One:* as an introduction to the study consisting background information, statement of the problem, objectives of the study, research questions, significance and organization. while *Chapter two*: covers literature review: -on theoretical reviews, empirical study, and conceptual framework in relation to the topic under study in Tanzania in order to identify gaps to be worked upon. *Chapter three*: devoted on examining methodologies like area of study, population, sample size and sampling techniques, data collection methods, types and source of data, reliability of data and data analysis methods to be used in data collection which concentrating on the topic under study : - *Chapter four* dealt with presenting data findings and results collected during the research study in relation to the demographic information and specific objectives of the study and start showing whether the study will bring tangible results or not. Lastly *Chapter Five* focused with analysis of presented findings and results of the previous chapter. Finally, *Chapter Six* provided a summary of the major findings of the previous chapters, leading to suggestions on areas for further research on the topic explored in this study. A reference and a set of appendices concludes the thesis.

1.9 Limitations of Study

During undergoing the study, a researcher faced some challenges especially reaching out CHWs community based who were not available at the time of data collection which led to some delaying. Also, this study was strictly confined in Kigamboni District with concentration in four Wards. However, since no studies have been conducted locally on CHWs the researcher was compelled to use examples from outside the country. Despite of mentioned limitations, a researcher made it possible for rescheduling based on their availability while also using more literature from outside the county while undergoing the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter revolved around critically reviewing available literature to understand key concepts of Community Health Workers (CHWs) and what other scholars have researched and brought out in relation to the topic under study in order to identify gaps to be worked upon. Based on available literature (both local and foreign there is sufficient evidence to underscore the importance of CHWs. However, gaps in the areas of competence and lessons that can be replicated elsewhere.

2.2 Definition of Teams

2.2.1 Community

The Cambridge dictionary defines community as the people living in one particular area or people who are considered as a unit because of their common interests, social group, or nationality. In Tanzania, a community, according to the Ministry of Health (2004), consists of people, living in the same area (urban or rural), with similar occupations or interests (such as farmers, pastoralists, fishermen, employees and self-employed and big business people) of the same origin (Europeans, Asians) or tribes. Generally, I can tell community is a group of people identified and sharing similar characteristics like social tie, culture, identity, activities, location, history as well as interest.

2.2.2 Health Workers

A health worker is one who delivers or gives care and services to the sick and ailing

person either directly as doctors and nurses or indirectly as aides, helpers, laboratory technicians, or even medical waste handlers (WHO, 2006). While generally health workers are those people working either at the health facility or in field based, professional in health matters or gain it by virtual experiences whom intention is serving life.

2.2.3 Community Health Workers (CHWs)

The Ministry of Health in Tanzania (2020) has defined a Community Health Worker as a person who volunteers to serve as a Community Health Worker and has successfully completed a three-month training programme approved by the Government for provision of health and social welfare services at the community level (MoHCDGEC, 2020). These CHWs can work serving the community in need at the facility level or in the community by being as a bridge between a health facility, social service and the community.

2.2.4 Emergency

According to Cambridge English dictionary, "emergency" is something dangerous or serious, such as an accident, which happens suddenly or unexpectedly and needs fast action in order to avoid harmful results. Emergency defined as "an imminent or actual event that threatens people, property or the environment and which requires a coordinated and rapid response (ISBU UK).

2.2.5 Competency

This is defined by Collins Dictionary as the ability to do something, while Cambridge. Org. Dictionary defines competency as the quality of or state of having suffi-

cient knowledge, judgment, skills or strength for a particular duty. Generally, this is the ability to respond to issues in effective and efficient manner.

2.3 Theoretical Literature Review

There are various theories applied in the humanitarian work in the community. Basing on the nature of this study *"The contribution competency and lessons learned from community health workers during emergencies in Tanzania*". A researcher has adopted "the participatory theory of development".

2.3.1 Participatory Theory of Development

The term participatory is not a new concept in development due to its manner of opposing the top-down approach (Waishbord, 2001). It emphasizes the bottom-up approach through empowerment of the local community. Robert (1983), the pioneer of participatory approach built his theory on the assumption that, stakeholders make decisions inclusively thus underscoring the importance of ownership of development processes, which, in turn, lead to sustainable impacts. The discourse included terms such as 'people-centred development', 'self-reliance', 'capacity- building', 'equality' and 'empowerment' (Burkey, 1993;). While participatory processes were formally introduced in the development arena in the early 1980s, the theory has become more prominent recently with both private and public sectors adopting and incorporating in their plans being implemented at the local level. Unlike in the past when emergency responses were done by few people, through CHWs the risk of getting negative outcome diminishes because CHWs are recruited from the same community with enough knowledge of the area in terms of surroundings, culture, neighbourhood, atti-

tude and past experiences which could be referred to when dealing with emergencies (Sen, 1999).

The relevance of the theory in this study is that it helped to show the importance of community participation during emergencies in their localities and empowered them to take charge of situations during the outbreak of diseases. The chosen theory was supported by experimental initiative done in Uturo dispensary in Mbeya Region, Tanzania where it increased utilization of Reproductive Health, Maternal, New born and Child Health (RMNCH) services in order to reduce maternal and newborn deaths. The initiative was trigged by high Infant Mortality Rate in the area. Initially, when a child died people said, *"si riziki" (not destined to be ours"* or simply *"unfortunate"*) (CBHP, 2020).

After observing in his study, the unfriendly health services rendered - shortage of skilled staff, lack of male participation during maternity period, limited availability of emergency care; especially at night, the researcher concluded that the increased pregnant-related death and neonatal deaths resulted from unfriendly services (CBHS, 2021). In response a participatory community-based method by mobilizing communities to take charge of their health including the use of committed female community volunteers known as *Makomando* in each hamlet was introduced, which in turn resulted in improved maternal and newborn health such that no maternal and infant deaths were recorded in the village for 21 years (CBHS, 2021). From the Uturo community experience it is very clear the contribution of CHWs is evident. The study, however, does not show the competency aspect of these cadres. Likewise, in-

formation is lacking on challenges experienced in service delivery and what could be learnt, emulated, improved and the like. These gaps need to be acted upon.

2.4 Empirical Literature Review

2.4.1 Global Status

Nicholls and et-al (2015) reported that CHWs serving in the communities where they live have been beneficial in emergency management planning and disaster recovery from both natural and technological disasters. Also, when properly trained, they constitute a proven strategy for timely interventions that aimed at reducing long-term collective trauma. Then the study recommended that dealing with characteristics and contribution of CHWs; and enhanced community resilience; and provided an overview of essential training needed to prepare them to participate in disaster preparedness, response, and recovery efforts.

Shokane (2016) in a study conducted in South Africa, observed that there was lack of cooperation and coordination among social agencies and there was rapid change in social environment. Also, there were some challenges, including limited income, accessibility, and lack of clear guidance, motivation and support in carrying out operations during emergencies. Charmaz (2011) dealt on challenges of social workers involved in the recovery of the Earthquake in China. The study worked on the understanding of the challenges of social workers' involvement in the recovery; specifically, on skills on social workers competence, government support, capacity to handle the situation and experience. Results showed that lack of skills on social

workers' competence, lack of government support and lack of capacity and experience in handling the situation was a problem.

Van Bortel T, Bsnayake A et al (2016) examined the association of economic loss, financial strain and the psychological status caused by Ebola outbreak in Sierra Leone. The study examined the effects of economic loss, life satisfaction and mental health problem as result of Ebola outbreak in Sierra Leone. Economic loss was measured in terms of impact on the income and households of the families affected by the Ebola pandemic. The correlation analysis showed that Ebola impact on income is significantly correlated with life satisfaction and depression. The regression analyses indicate that Ebola impact on income is indirectly associated with life satisfaction through its effect on financial strain. The study recommended that, there was a need to highlights the importance of coping strategies in maintaining a balance between economic status and living demands for disaster victims Van Bortel T, Bsnayake A et al (2016).

In all above studies (Lowman 2015, Shokane 2016, Charmaz 2011 and Van Bortel T, Bsnayake A et al (2016) the contribution of CHWs is brought out very clearly. However, there is silence when it comes to training and competence. Even WHO notes the absence of formal training for CHWs other than working by intuition but does not specify what type of training is required.2.*4*. 2 Contribution of CHWs during emergencies.

CHWs contribution during emergencies is inevitable considering their role in linking vulnerable populations and healthcare providers. CHWs provide an effective linkage

between communities and the healthcare system. They also help patients navigate healthcare and social service systems (NIH, 2018). In many areas CHWs during emergencies stand a better chance in ensuring cultural competence among healthcare providers serving vulnerable populations (Rural Health Information Hub, 2020). As already stated elsewhere, both literature and field information converge on the contributions of CHWs. WHO as well recognizes the role, impact, acceptability and relevance in communities (WHO, 2019).

2.4.2 Knowledge and Skills of CHWs in Dealing with An Emergency

CHWs are front-line public health workers accepted to work within the communities they serve. Such acceptance and trusting relationship enable the Community Health Workers to serve as intermediaries between health/social services and the community to facilitate access to services and improve the quality and cultural competence of service delivery (WHO, 2021). They also build individuals and community capacity by increasing health knowledge and self-sufficiency through a range of activities such as outreach, community education, informal counseling, social support, and advocacy (APHA, 2021).

However, when it comes to their knowledge and skills WHO states clearly that, the cadre has no formal training in the profession other than learning while at work. In some areas, people cannot distinguish between CHW and Professional Health Worker because of their effectiveness in the field (WHO, 2021). Now WHO is working out on strategies that can accommodate CHWs incentive packages and training programmes for CHWs (Crigler, 2014). Additionally, most literature now favors the

training of CHWs to better their knowledge and skills (Ngabonziza, 2019). for growth and development of health sector. From the above it is very clear issues of competence of CHWs have in the past been given priority and remains a challenge. (Fliert and Thomas (2020)

2.4.3 Lessons Learned in Strengthening Resilience in Emergencies

Globally, CHWs are recognized as key component for effective COVID-19, cholera and other disaster responses. During the outbreak of COVID-19 in Tanzania and Italy it required a shift from hospital-centered care to community-centered care (El-Jardali, Fadlallah et.al, 2020). This alone justifies the need for the government to provide funding to CHWs, to strengthen resilient health systems and public health emergency preparedness (Bezbaruah1 S, Wallace P., 2022). Notwithstanding the noble role of CHWs in health sector, their own welfares remain uncertain because they are not accommodated in government budget allocations (Perry H, Zulliger R and et.al, 2017), (Bezbaruah1 S, Wallace P., 2022).

2.4.4 Research Gap

Most of the literature review like Shokane (2016), Ngabonziza (2019), Fliert and Thomas (2020), Lowman (2015), Charmaz (2011) and Van Bortel T, Bsnayake A et al (2016) few mentioned on conceptual review and framework, theoretical review, empirical review was mainly outside Tanzania. The topic under study: ‘The contribution, competency and lessons learned from community health workers during emergencies in Tanzania’. The literature review touched much on framework guiding CHWs, their knowledge, skills and lessons learnt to strengthen resilience while deal-

ing with emergency issues. Therefore, it was imperative to conduct the study to assess three variables of contributions, competency and lessons learnt from CHWs in times of emergency in Tanzania; specifically, in Kigamboni District, Dar es Salaam.

2.5 Conceptual frame Work

This framework is used to measure different variable within objective of study while researching. It includes both independent and dependent variables; while independent variable affects other variables that are dependent due to its influence over independent. In this study using a drawn figure (Figure 1: Conceptual framework) is showing the interrelationship of research independent and dependent variables that the improvement of CHW works and practices can be seen and observed through assessing their contributions in the sector, knowledge, skills as well as lessons leant.

For example: Having the improved CHW practices during emergencies can be possible when their knowledge and skills are well improved and their contribution are assessed. These skills and knowledge necessary for their practices can be gained through working experiences, practices and capacity building along the line of performing their duties. Also, through lesson leant, means their initiatives will be notable, seen, shared and acknowledged at wider range. Therefore, dependent variable cannot stand and noted if standing alone, it’s very important to involve independent variable since are the once bring the existence and more weight to dependent ones. The framework is shown in graphic presentation.

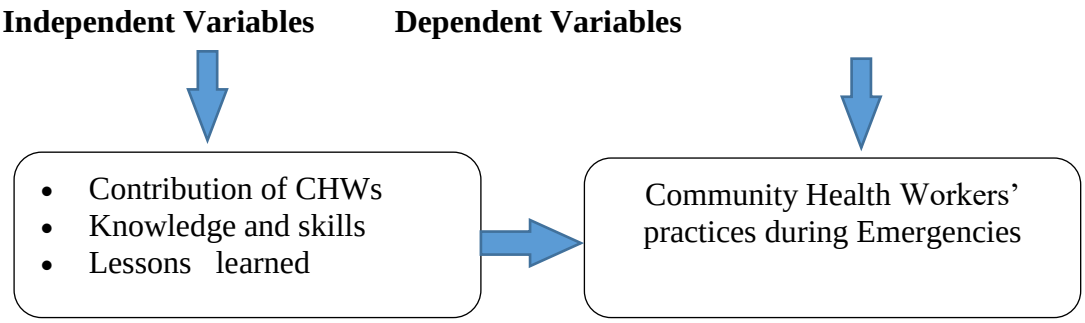

Figure 2.1: Conceptual framework

Source: Authors Version (2021)

2.6 Conclusion

Generally, in this chapter explain about the conceptual review by defining important teams that importantly was used along the study that are Community Health Worker, community, health worker, emergency and competency. While in theoretical review is all how participatory development theory is selected and important that emphasizes the bottom-up approach through empowerment of the local community. This approach was pioneered by Robert (1983) with assumption that, stakeholders make decisions inclusively thus underscoring the importance of ownership of development processes, which, in turn, lead to sustainable impacts. This is important to this study selected since it showcases how community participation is vital during emergency that is supported locally by experimental initiative done in Uturo dispensary, Mbeya.

In empirical review, was all about how CHW have beneficially contributed to the emergency management planning and disaster recovery from both natural and technological disasters with reference from other countries in Europe as well as at regional level in Africa. All reviews acknowledge the competency of CHW,

knowledge and skills when working at emergency, lesson leant to strengthen the resilience as well yes there is no mentioned gap that this study doing to note down through working on independent and dependent variables,

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents research methods and procedures employed in conducting the study. It includes stages from data collection and data presentation and analysis. It also comprises the area of study, design of the study, types and source of data collection methods, population sample and sample size, sampling methods, data processing and analysis, data validity and reliability, ethical considerations and reference. In this part of the research is giving the credibility of the presented information from previous chapter one and two were justifiable through convinced methodologies like methods in research and a description of data selected by a researcher of this study.

3.2 Research Philosophy

This is a framework that guides how research should be conducted based on ideas about and the nature of knowledge. The two main research philosophies are positivism and interpretivism. These philosophies represent two fundamentally different ways that we as humans make sense of the world around us: in positivism, reality is independent of us and researchers can therefore observe reality objectively. In interpretivism, reality is seen as highly subjective because it is shaped by our perceptions (Collis and Hussey, 2018).

This study, a researcher uses positivism philosophy which is originated from the natural sciences and finding proof that derives from statistical analysis. Due to the nature of this study focused in assessing *"The contribution competency and lessons*

learned from community health workers during emergencies in Kigamboni district, Tanzania"; positivist open up to a researcher being neutral and detached from your research and data in order to avoid influencing your findings (Crotty 1998). This means a researcher can research, as far as possible, in a value-free way. For positivists, this is a reasonable position, because of the measurable, quantifiable data that they collect. (Collis and Hussey, 2018).

3.3 Study Area

Kigamboni is one of the five Districts of Dar es Salaam Region in Tanzania. The other four districts are Temeke, Ilala, Kinondoni and Ubungo. It was established in 2015 through Government Gazette Number 462. The district has an area of 577. 9 Square kilometers with an estimated population of 238,591 as per 2022 national census data. The district has one Division, which is divided into nine administrative Wards and 67 Streets (http://kigambonimc.go.tz/). The study was conducted in four out of nine administrative Wards in Kigamboni District because of their population diversity, availability of data and feasibility reason in the four Wards - Kibada, Tungi, Mjimwema and Kisarawe 11. The four selected Wards have nine Dispensaries and eight health centres. Among them nine Dispensaries are owned by the government. Four other Dispensaries and eight Health Centres are private. (Kigamboni Social Economic Profile, 2019).

3.4 Research Design and Procedures

The study was cross-sectional study design which is descriptive that enable a researcher to examine distribution of variables and enable easier data collection at once

using both qualitative and quantitative research approach to get wide range of relevant and valid information from targeted respondents through the use of questionnaire for qualitative approach while in qualitative interviews and focus group discussions were used (Jolley, 2017).

3.4.1 Study Population

The targeted population of the study area was the community living in Kigamboni District particularly in four administrative Wards with special focus on CHWs working in Emergency situation together with community and government officials working in there. The study population comprised 8 local leaders, 25 ordinary people above the age of 18, 7 CHWs located in Kigamboni. They were randomly picked from eight selected Streets of Tungi, Mjimwema, Kisarawe 11 and Kibada wards as determined by the sampling technique and sampling method of the study. These respondents provided the required information that was relevant to the research objectives of the study.

3.4.2 Sampling Techniques

The use of both probability and non-probability sampling were used to get respondents who provided answers to the research questions. In probability sampling that give an opportunity to all population have equal chance to be selection; respondents were selected based on age, education, location and position (Saunders, 2012). Additionally, a purposive sampling was applied to select key informants; for the study were male and female CHWs volunteering at specific selected wards in Kigamboni district.

3.4.3 Sample Size

Due to nature of the study, the researcher was confined to use the sample of 40 CHWs representatives since the district had a total of 75 CHWs among them only five are males while 70 are females. (Kigamboni Social Economic Profile, 2019). Furthermore, 40 respondents (7 CHWs, 8 government officials and 25 community members) were obtained using Yamane formula.

$$n = \frac{N}{1 + Ne^2}$$

$$n = \frac{75}{1 + 75 * 0.05^2} = 40$$

3.5 Methods of Data Collection

In this study, the researcher used three ways of collecting data for research. In this study, the researcher used Questionnaire, Structured interviews and Documentary Review.

3.5.1 Questionnaire

Through Questionnaire, the structured questions were developed using likert scale from study objectives as shown in Chapter One. The method was adopted by the researcher because it was easier to analyze qualitative information, multiple data was presented and managed. The method was used to collect information on the contribution of CHWs, knowledge, skills of CHWs and lessons learned to strengthen resilience on emergency matters to 25 community members. (Appendix iv: questionnaire for the sturdy).

3.5.2 Structured Interview

The procedure was guided by a checklist of questions and correspondents whom were 8 CHWs and 8 government officials were interviewed to get credible information as per objectives. The questions were structured in English but the interview conducted in Kiswahili. This process was recorded and latter translated for analysis and writing on lessons learned for strengthening resilience on issues related to Community Health Workers (CHWs) during emergencies in Tanzania. Appendix v is showing the guiding question for interview,

3.5.3 Documentary Review

The researcher used documentary review including reports articles as secondary data to enable the researcher get a clear picture of CHWs activities in relation to the topic was investigated. Documentary review as used as reference like reports, articles, journals and related publications provided a useful information.

3.6 Data Processing and Analysis

The researcher carried out the process of checking the data to detect, correct errors and omissions and selected well filled questionnaire. It involved organizing, editing, and classification to ensure the data were correct, accurate, and consistent with other facts gathered and arranged to smoothen coding and tabulation. The quantitative data was analysed by using descriptive statistics whereby information received from the field were processed through the use of Statistical Package for Social Scientists (SPSS version, 2020) to determine the frequencies, percentage and regression analysis in relation to the research objectives.

3.7 Reliability and Validity of Data

3.7.1 Reliability of Data

To ensure reliability of data, all filled questionnaires were rechecked to see if there was any errors or misinterpretation of data since inaccurate data can lead to wrong analysis and presentation. Reliability reflects the consistency of the method tool used; the data collected if they were reliable.

3.7.2 Validity of Data

Validity refers to accurate and relevance in relation to expected goal. To ensure data validity, it is important to establish clear data collection methods, use standardized measurement tools, and implement quality control measures. Data validation techniques such as cross-checking and verification was applied during selection of key informants for data collection in Kigamboni through the councils and ward executive office in selected areas.

3.8 Dissemination of the Study

Data collected in the study will be distributed to the Library of Open University of Tanzania, Office of Kigamboni Medical Municipal Officer (MMO, Dar es Salaam Regional Medical Officer (RMO) and the Ministry of Health.

3.9 Research Clearance

The researcher observed all required research procedures before proceeding to conduct the study as follows:

i) Before starting the study, official permission was obtained from OUT, Faculty of Social Sciences.

ii) Also, permission to conduct the study was obtained from the selected District and local government authorities.

iii) Due to the sensitive nature of the research information, no identifying information of respondents was required.

iv) The utmost privacy in the questionnaire's filling process was ensured for all study participants.

3.10 Conclusion

Concluding this chapter, it was all about the methodologies applied in the study. This is including analyzing the study area and population under study that is of four administrative wards of Kigamboni district in Dar es Salaam; research design procedures used which is cross-sectional study design that used also both qualitative and quantitative research approach; probability and non-probability sampling techniques applied; data collection methods (structured interview, questionnaire and documents review); dependent and independent study variables; reliability and validity of data; dissemination of the study an research clearance; and lastly was data process and analysis where by Statistical Package for Social Scientists (SPSS version, 2020) to determine the frequencies, percentage and regression analysis in relation to the research objectives.

CHAPTER FOUR

FINDINGS

4.1 Introduction

This chapter presents data findings collected during the research study in relation to the demographic information and specific objectives. In the last chapter, I have presented methodologies and procedures employed in conducting the study. It includes stages from data collection and data presentation and analysis which paved the way to result presentation in this chapter based on the research questions which are: What is the contribution of CHWs during emergencies in Tanzania? Do CHWs have the required knowledge and skills to deal with emergencies cases? And what lessons can be learned from CHWs when it comes to strengthening resilience issues related to emergency. The presentation of findings concentrates on presenting the results and findings from the field data collection in Kigamboni district which is very crucial in responding to what has been found in relation to the research objectives. The presentation will be done through narration and summarized on a table using APA style table formatting. The focus in this chapter will be presenting the all-necessary information and findings gathered from field using the sited objectives and questions that all lead to assessing whether the research is viable or not to the end.

4.2 Demographic Profile

In this study, demographic profile was examined in terms of respondent's age, gender and education background as represented below.

4.2.1 Respondents by Age

The researcher grouped respondents based on their ages. Respondents equal to 22.5% were aged between 18 and 25 years, 15 respondents equivalent to 37.5% were between 26 and 35 years, while 16 respondents representing 40% were aged 36 years and above. The highest number of respondents falling under the category of 36 years old and above provided enough information coupled with vast experience.

4.2.2 Respondents by Gender

The study intended to find out the gender representation by considering both female and male. Based on the questionnaire, 16 respondents were females, which are equivalent to 40% while 24 respondents were males representing 60%, which indicated a good representation of gender in this study.

4.2.3 Education Background

The level of education was very vital measure for any activity that is intended to be done. This study intended to determine the education background in relation to CHWs during emergencies. Results from Questionnaire from the Respondents and Interviews show that three respondents representing 7.5% had Primary Education. In the Secondary Education category were 12 respondents equivalent to 30% while respondents with Diplomas were 25 equals to 62.5%. The study shows that most of the respondents fell under the Diploma category. This meant that people involved in data collection were matured, skilled and knowledgeable to social issues around the community because 92.5% of them had secondary education and above. 90% of

CHWs who were reached by the researcher had secondary education, 7% had primary education and 3%were diploma holders.

Table 4.1: Showing representation of demographic data

Demographic data	Group	Frequency	Percent
Age	18-25	9	22.5
	26-35	15	37.5
	35 and above	16	40
	Total	**40**	**100**
Sex	Male	24	60
	Female	16	40
	Total	**40**	**100**
Education	Primary level	3	7.5
	Secondary level	12	30
	Collage level	25	62.5
	Total	**40**	**100**

Source: Field data (2021)

4.3 Assessment of the Contribution of CHWs during Emergencies

Assessment on contribution of CHWs during Emergencies was studied under four categories to understand what CHWs is all about; how the Kigamboni Authority is working with CHWs, Roles and Responsibility of CHWS in the Communities and to what extent their Roles and Responsibilities are known to the Public.

4.3.1 Understanding the Concept of CHWs

Some people in the communities tend to ignore the participation of CHWs in Community. This study sought to find out if there is common understanding of what CHWs is all about. Results from the questionnaire are represented in Table 2. The result indicates that the community understands what CHWs is all about as 26 out of 40 respondents, equivalent to 65% responded in the category of “Agree” (Table 2).

4.3.2 Kigamboni Authority Working with CHWs

It is true that there is no separate entity that works without communication with other departments. This study sought to find out if the Kigamboni Authority was working with CHWs. Results shows that Kigamboni Authority is working with CHWs. Thirty out of 40 respondents, which is equivalent to 75% responded in the category “Agree” (Table 2).

4.3.3 Roles and Responsibility of CHWs in the Community

The study intended to find out if the Community is aware of Roles and Responsibility of CHWs. The results show that Roles and Responsibilities of CHWs in the Community is known given that out of 40 respondents who represent 55% 22 were in line with “agree” (Table 2). This shows a clear-cut mechanism to deal with the matter since they know the objectives and activities of CHWs.

4.3.4 The CHWs Roles and Responsibilities Are Known Among Themselves

Results from the questionnaire as presented in Table 4.2 is shows that 40 (100%) respondents from four wards agreed that CHW knew their roles and responsibilities.

4.3.5 The Presence of CHWs is Vital in the Community During Emergencies

The study sought to gauge to the extent the presence of CHWs in the community to handle emergency cases was vital or not. Out of 40 respondents reached, 27 (65%) were categorical in the importance to have CHWs during emergency. 13 respondents (32.5%) where not sure while on respondent disagreed to the posed question. At any rate this is a clear indicator that their presence is valued in the communities.

Table 4.2: Assessment on the contribution of CHWs during emergencies

Measurement	Agree (%)	Neutral (%)	Disagree (%)	Cumulative percentage (%)
Understanding of CHW	65	15	20	100
Kigamboni authority working with CHW	75	10	15	100
Roles and Responsibilities of CHW in the community	55	17.5	27.5	100
Roles and Responsibility known among CHW themselves	100	0	0	100
The presence of CHWs during emergency is vital in the community	67.5	32.5	0	100

Source: Field Data (2021)

4.4 To Evaluate the Knowledge and Skills of CHWs in Dealing with Emergency in the Study Area

Evaluating the knowledge and skills of this voluntary cadre during emergency in the study area will focus in assessing if CHWs are knowledgeable enough to perform their duties, Understanding the Operating Standard Procedures during Emergencies, Self-protection when working on emergency situation and the availability of CHW is covering the shortage of Human Resource for Health (HRH).

4.4.1 CHW is Knowledgeable Enough to Perform Their Duties

It is indisputable that knowledge is an important requisite for a person to perform better his/her duties including CHWs. This study sought to know the relationship between volunteers working in the community and the level of knowledge required. Results from the questionnaire are represented in Table 4.3**.** Results shows that CHWs have the required knowledge to perform their duties during emergency as 22 respondents equivalent to 55% responded in the category of “agree”. This implies that CHW requires knowledge in their duties, thus good knowledge and skills are important. One male CHW said, the Council provided them with training zeroing

TB, HIV/AIDS, nutrition and how to trace contacts and loss follow ups. The training module was a community-based program. The imparted knowledge included capacity of making consultation with prospects or contacts, tracing in the community, testing, care and counseling secrecy and politeness. On the other hand, 18 respondents equivalent to 45% fall under disagree category and neutral position respectively. This means not all who responded to questionnaire understood the required knowledge for CHW as most of respondents under this category were ordinary members of the community.

4.4.2 Understanding the Operating Standard Procedures during Emergencies

The study sought to capture the understanding of community and CHWs on operating standard procedures for CHWs in the study area. The results from the questionnaires are presented in Table 4.3. Results show that 12 respondents equivalent to 30% responded in the category of agree, 13 respondents equivalent to 32.5% were neutral and 15 respondents equal to 37.5 % disagreed. This indicates low awareness in the targeted population in the study area on the standard operation procedures during emergencies (Table 3).

4.4.3 Self-Protection When Working on Emergency Situation

Self-protection during emergency operations is inevitable taking into consideration that safety related issues must be given priority. The study sought to establish if there is understanding of self-protection and their methods among CHWs in working at emergency situation. Results from the questionnaires are represented in Table 4.3. Results show that 10 respondents (23.8%) agree that they understood the importance

of self-protection gears when working in crisis situation, 14 respondents (33.3 %) were neutral and 16 respondents (38.1%) disagreed noting that there is insignificant understanding of self-protection in emergency situations. Ten per cent of those who agreed said they understand self-protection in CHW, explaining that working in critical situations handling TB patients, PLHIV and others requires them to adhere to self-protection procedures. Self-protection gears mention include: gloves, masks, sanitizers and soap to mention few (Table 4.3).

4.4.4 The Availability of CHW is Covering the Shortage of Human Resource for Health (HRH)

Since the Community is the final beneficiary of the work done by CHW and given the shortage of HRH in most of health facilities, the study sought to know whether their presence could help to reduce the shortage of human resources in health facilities. Results from the questionnaires are represented in Table 4.3.

Table 4.3: Evaluating the knowledge and skills of CHWs in dealing with emergency in the study area

Measurement	Agree (%)	Neutral (%)	Disagree (%)	Cumulative percentage (%)
CHWs need have knowledge to perform their duties	55	20	25	100
Operating Standard Procedures during emergency in the study area.	30	32.5	37.5	100
Roles and Responsibilities of CHW in the community	55	17.5	27.5	100
Self-protection Methods in working in emergency situation	23.8	33.3	38.1	100
Availability of CHW is covering the shortage of HRH	55	27.5	17.5	100

Source: Field Data (2021)

Results revealed that 22 respondents, equivalent to 55% fell in the Agree category, 11 respondents (27%) were neutral while seven respondents equivalent to 17.5 % fell in the Disagree category. These were of opinion that their presence and availability do not cover the shortage of HRH in health facilities in Kigamboni. Those in agreed category argued that volunteers are helpful to the public health facilities.

4.5 To Identify Lessons Learned to Strengthen Resilience on Issues Related to Emergency

The use of CHW is of paramount importance in building community resilience especially during emergency**.** The capacity of a community to handle disaster related issues their ability to respond to or recover from disaster is critical. The study sought to confirm the impact of CHWs in building resilience during emergency. The results from questionnaire are presented in Table 4.4. The results show that 37.5% of respondents agreed that CHWs were helping to build community resilience while 27% fell in neutral category and 35 % disagreed.

4.5.1 There Are Lessons That the Community Can Learn from CHWs Following Their Involvement in Emergency Related Issues

The study sought to know what lesson community can learn from CHWs work in their community. The results from field are also presented in Table 4.4. 52.5% of all Respondents interviewed in the community agreed that there was a lesson to learn from CHWs work in the community. They noted that volunteering in the community is not about cash but rendering free services to individuals or community.

4.5.2 Challenges Facing CHWs When Performing Their Duties in Tanzania

Challenges that face CHWs as captured in the study through interviews and filled the Questionnaire, are shown in Table 4.4. The Respondents who disagree and those who remained neutral make 52.5% while those who fell in the agreed category stands at 47.5%. The respondents brought out a number of challenges facing CHWs. The list includes: Financial constrains to support their daily movement, lack of working equipment notable first aid and protective gears. According to them, Community responsiveness is lukewarm while the Government was taking too long to hasten the implementation of Community health-based programs and motivating CHWs.

Table 4.4: Lessons learned to strengthen resilience on issues related to emergency

Measurements	Agree (%)	Neutral (%)	Disagree (%)	Cumulative Percent (%)
CHWs help in building community resilience especially during emergencies	37.5	27.5	35	100
Lesson that the community is learning from CHW's involvement in emergency related issues	52.5	25	22.5	100
Challenges facing CHWs when performing their duties in Tanzania	47.5	25	27.5	100

Source: Field Data (2021)

4.6 Conclusion

The presence of CHWs in the study area is acknowledged by the Community as direct beneficiary of the work done given the shortage of HRH in most of health facilities. The presence not only helps to reduce the shortage of human resources in health facilities, but also in building community resilience; especially during emergency**.** Equally important, the presence of CHWs renders support in building the necessary

capacity of the community to respond to disaster. Likewise, usage of CHWs is of paramount importance in building community resilience in times of emergency**.** Based on the respondents in the study area, CHWs face myriad of challenges ranging from financial support to facilitate their daily movement, working equipment notable first aid and protective gears. According to CHWs, while the Community responsiveness is lukewarm, the Government was taking too long to hasten the implementation of Community health-based programs and motivating them.

CHAPTER FIVE

DISCUSSION OF THE FINDINGS

5.1 Introduction

Community Health Workers (CHWs) are critical to improving individual and community health through their ability to build trust and relationships and in deepening communication between patients and service providers. CHWs have deep understanding of their communities through lived experience, which makes them exceptionally qualified to address social and behavioral determinants of health (Medline search, 2020).

As stated elsewhere, efforts to expand and fund this cadre of workforce is a food for thought for policymakers and service providers. Existing studies on CHWs focus on assessing their effectiveness in improving health outcomes, reducing healthcare costs, and bridging the gap in health disparities. The number of researches works on the impact of CHW-led interventions and programs have equally increased dramatically over the past fifty years, and the scientific rigor of study designs have likewise improved notably.

5.2 Demographic Characteristics

It is an undeniable fact that, increased demand for Community Health Workers (CHWs) has compelled the global society to recognize their importance in serving their communities. CHWs have always tailored their service to meet needs of the communities they serve. However, CHWs' effectiveness depends on factors such

their education, capacity to perform duties, and working experience with specific communities' populations (MoH/Kenya, 2020).

Community Health Workers (CHWs) with no denial helps to connect community members to available services and resources. They provide benefits to individuals, communities, assist health service providers during emergency. Since CHWs are often members of the communities they serve, they have automatically a strong rural or urban community connections (Parray A., Sambit Dash S. Et al, 2021). Based on the demographic characteristics that this study examined - gender, age, sex and education background a number of notable experiences were captured as follows;

Roles within the health workforce are highly gendered and health systems rely basically on female. It is estimated 70% of CHWs volunteers are women (Keeru L, 2017). Due to gender roles women seen more as caretaker of their families and are natural researchers. Similarly, CHWs have untapped insights around gender, equity, power struggles and this should be tapped to build more responsive health systems. When family members fall sick, they suffer. Not all CHWs get remuneration in their roles, but they are motivated by the fact that healthier children and families reduces burden on their shoulders (Keeru L, 2017). This is a major factor that motivates women to support CHW cadres when emergencies erupt in the community. In Kenya, 63% of Community Health Assistants (CHAs) and 73% of community health volunteers (CHVs) are female. This type of "woman-to-woman" platform is considered a high-impact practice for increasing access to health services at local level (Collins A, 2022).

While in Global health reported in Liberia, women make 20% of them namely Community Health Associates (CHA) 2021; Even in Afghanistan, which is unfriendly to gender equality, CHWs make up the majority of the health workforce in the remote areas. (Parray A, Dash S et.al 2021). Both the National Operational Guideline for Community-based Health service, 2021 and that of Kenya Community Health strategy (2020-2025) support equal opportunities for male and female in the voluntary cadre. However, there disparities in terms of remunerations like payment, nature of work, motivation, retention and gender sensitivity issue disparities from one nation to another.

Based on the result of this study, out of 8 CHWs reached out for interview, only one was a man. In Rwanda, they deploy one male and one female for one operational (Exemplars news, 2021) this in relatively equal to In Afghanistan due to female mobility is largely limited due to cultural and religious norms. Thus, female CHWs are often accompanied by a Mahram who are usually their husbands, brothers, or fathers acting as religious guardian (Parray A, Dash S, 2021).

In relation to age, the operational guide lines for Tanzania (2021) and Kenya (2020 - 2025) indicates that CHWs assume supportive roles when they reach 18 years; whereas in India they age from 25 to 45 (Sarin E and Lunsford S, 2017). In the Kigamboni case study all 8 CHWs were aged between 26 to 45 years. When it comes to legal framework and guidelines for CHWs all reviewed countries use specific operational guidelines for efficiency and effectiveness.

The study revealed that the government had re-introduced the use of volunteer CHWs that seeks to increase community involvement, participation and ownership in provision of health services and in integrating social welfare services in community-based services provided by CHWs. Kenya on the other hand, passed the Community Health Strategy 2020-2025 after the development of health policy (2014-2030). Both documents are geared to attain the highest possible health standards in a manner responsive to communities' need. (Kenya health policy, 2014-2030)

The CHWs were using different platforms to create awareness on diseases at health facility and at the community level. The education provided is based on the government guidelines. In Afghanistan, Kenya, Rwanda and India CHWs are given before standard training on their roles and responsibilities before deployment. While in Afghanistan the basic package of health services does not require the CHWs to have any formal education, they are, however, given eight weeks intensive (Parray A, Dash S, 2021). The CHWs in Kenya are given three months training based on a curriculum with 13 modules. The full curriculum consists of 324 facilitator-led contact hours in a classroom setting and 160 hours of practical experience (Njiraini R and Hussein S, 2020).

The above case studies underscore the importance working with the cadres who are well equipped to assume their responsibilities. Findings from this study indicate that three respondents representing 7.5% had Primary Education. In the Secondary Education category were 12 respondents equivalent to 30% while respondents with Diplomas were 25 equals to 62.5%. The study shows that most of the respondents fell

under the Diploma category. This is a clear indicator that people involved in data collection were matured, skilled and knowledgeable to social issues around the community because 92.5% of them had secondary education and above.

5.3 Contribution of CHWs During Emergencies

Community Health Workers' contributions in emergency situations in health sector in Tanzania and elsewhere globally has proved worthwhile. They have helped to improve access to health care services to many people. During data collection of the study, many respondents interviewed acknowledged that the CHWs contributions in health sector were valuable. CHWs have extended the reach of healthcare providers and services particularly in areas with shortages of health service providers. They also strengthen care coordination by connecting patients with available healthcare and social support services (Medline 2020). They equally, empower their communities through their peers, education and connections to health and social resources as out of 40 respondents interviewed 26 equivalents to 65% agreed that their presence in the community plays key role during emergency following their voluntary roles and duties in community.

Their roles and responsibilities in the community are in line with the national guideline for community health-based care program (CBHP, 2020). Screening, counselling and testing for pandemic diseases like ATM and COVID 19, providing education on reproductive health, environmental care, and preventive mechanism for pandemic, contact or tracing for people tested positive. Preventing mother to child HIV infections through mentoring and education, providing sexual and reproductive health

care education. The education is provided by them at the facility level (OPD and CTC) by the facility based CHWs while for those community-based use public meetings and door to door visits and writing reports for duties performed to superiors in charge (CBHS, 2021).

The community understands the roles of volunteers during emergency and in health sector in which 65% of respondents said they understood the importance of CHWs as 75% of all respondents supported. Since CHWs themselves seem to know their roles and responsibilities to the community, the voluntary cadre was introduced to mitigate HRH shortage and health facilities especially in rural areas. This fact concurs with a study held in Kenya. Following challenges to access health services by the community, the Kenyan government developed a Strategy that transformed health services and accelerate the attainment of health goals closer to community and named them Community Health Volunteers (CHVs) chosen by the community. They were trained to address health issues to communities in their respective localities and work closely with health facilities (The government of Kenya, 2019).

Insufficient number of health professionals, maldistribution, and shortage of facilities in Madagascar limited access to health and nutrition services. In response the government introduced two cadres in Madagascar: Agents *Communautaires de Nutrition* (ACNs) focusing on nutrition-related activities, and *Agents Communautaires* (ACs) focusing on general health activities. ACNs provide treatment of moderate acute malnutrition and monitor nutritional status, in addition to health promotion activities such as nutrition education and cooking demonstrations for mothers through home

visits and conduct outreach, (Madagascar Millennium Development Goals National Monitoring Survey (MMDGNMS), 2020).

In Liberia, the seven-year civil war between 1989 to 1996 left its health infrastructure devastated and less than a decade in 2014 Ebola virus outbreak hit the country, further overwhelming already weakened public health systems. Due to chronic shortage of higher-level trained workers, poor roads, and weak health infrastructure, its population of 4.7 million people depended on Community Health Volunteers for basic health services (MoHSW/Liberia, 2015-2021).

It is clear, studies related to contribution of CHWs emergencies in Tanzania and elsewhere. CHWs work as volunteers on various roles in a range of settings and they come from diverse educational and experiential backgrounds (CBHS, 2021). In Tanzania the duties and functions of CHWs are defined and structured by the Ministry of Health. Additional to responding to emergencies cases, CHWs are detailed to engage in health promotion, environmental health, hygiene and sanitation, nutrition, social welfare services, the fight against communicable and non-communicable diseases (MOHCDGEC, 2020). The national guideline known as CBHCP, 2020 clearly states that there should be two CHWs in each street. The volunteers have to be selected according to standing guidelines and they should be trained before starting work (MoHCDGEC, 2020).

The voluntary cadre was introduced in many nations to support in the provision of health services at local level; yet the management style differs according to guide-

lines adopted by their respective governments for example, the management and deployment of CHWs require resources from themselves when performing their duties from the state on being deployed at facility and community level.

In Liberia, the revised National Community Health Services Strategic Plan, 2016 allowed a new cadre community health worker called Community Health Assistants (CHAs), which was created to upgrade the community-level workforce to be paid salary. By late 2019, 3,761 CHAs and their supervisors, Community Health Service Supervisors (CHSSs) had been deployed to serve communities (Liberia Demographic and Health Survey (DHS) 2019-2020). However, in Tanzania, CHWs have no regular payments like salary from the government. Instead, the CBHCS has provided a guideline to be adopted by local councils for smooth management of CHWs and that the government will work with development partners to fill the resources gap through general budget support, health-based pooled funding and direct to project.

Additionally, the government mobilizes resources from non-traditional donors such as private philanthropic foundations and the private sector. In order to harmonize and optimize use of resources, the Government of Tanzania has put in place systems and structures to guide resource mobilization from domestic and external sources, and ensure proper management of funds geared to support community-based health care services. (CBHCS, 2021).

With regards to population served by CHWs also differs from one country to another. While, in Tanzania every Street in a Ward should have at least two CHWs in ac-

cordance with the national guideline for community-based health program of 2021, in Liberia one CHW/CHA is serving from 40 to 60 households or 350 people living five kilometers from a health facility, according to Liberia Demographic and Health Survey (DHS) 2019-2020).

5.4 Knowledge and Skills of CHWs In Dealing with Emergency in the Study Area

Knowledge and skills are important requisites for persons working in health sector. Field observation in the study area reveals that most of CHWs acquire knowledge and skills on the job training and working experience. Skills required, according to Cuvelier M. (2019) include: Capacity Building Skills/empowering client; Care Coordination between client and a service facility; Communication skills; Cultural Responsiveness; Facilitation; Evaluation and Research; Individual and Community Assessment; Understanding basic public-health principles; Interpersonal and Relationship-Building Skills; Outreach Skills, Methods and Strategies; Track clients' progress, follow up and make referrals; Organizational and Documentation Skills; as well as setting clear goals and time management skills. Knowledge is also acquired through training given by non-governmental organizations, governmental ministries and institutions. In Rwanda, Kenya and Tanzania governments have developed and adopted training modules that ensure CHWs have required knowledge and skills.

Already Rwanda has been providing training based on available funding since 1995 (Williams P, 2020). Tanzania, on the other hand provide three months training, mentoring and support to selected CHWs with seven modules that focus on: Basics of

Health Promotion for Community Health Worker; Reproductive, Maternal, New-Born, Child and Adolescent Health; Prevention and Control of Communicable Diseases; Prevention and Control of Non-Communicable Diseases; Prevention and Control of Malnutrition in a Community; Fundamentals of Social Welfare Practice for Community Health Worker and Basic Curative Services. The trainings are provided with government funds at council level or with support from development partners (MoH/Tanzania, 2022). Given the importance of CHWs work, most of governments in Sub Sahara Africa have been imparting knowledge and skills on CHWs using training programs despite of limited resource. They also rely heavily on donor's despite of having complex channels, insufficient funding envelopes, and misaligned time with country needs to the extent such programs fail to reach their full potential (Perry H. 2018).

Based on field data collected only 22 respondents equivalent to 55% agreed that CHWs have the required knowledge while 12 respondents equal to 30% are aware to operating standard procedures during emergency and only 10 respondents equivalent to 23.8% understand that the self-protection methods in working at emergency situation from 40 respondents reached out. The field data are in tandem with Perry's observation (2014) that inadequate capacity building of CHWs affects greatly service

5.5 Lessons Learned to Strengthen Resilience on Issues Related to Emergency

The use of CHWs has been of good help in building community resilience during emergency periods by enabling the community and victims of emergencies to adopt coping mechanisms. This has been possible due to CHWs voluntary work in empow-

ering communities to respond, withstand, adopt and recover from adverse situations in order to minimize side effects of an emergency (Salve and Gooding, 2022). The volunteering cadre is pivotal in improving disaster response and recovery because of its effectiveness in enhancing the overall health of communities, increasing disaster preparedness, supplementing the efforts of disaster responds, and building trust among all interested parties and empowering them to assume the responsibilities (Nicholls, 2017), (Salve and Gooding, 2022).

In this study it has been shown that CHWs do help communities to build resilience during emergencies. Out of 40 respondents, 15 of them, which is equivalent to 37.5% agreed that CHWs work build community resilience, 11 were neutral while 14 (35%) disagreed. This differs from Miller's N, and others study of 2018 during the Ebola outbreak in Guinea, Liberia, and Sierra Leone, which indicated that they played a very important role. Among them were social mobilization and community engagement on Ebola prevention and control. Activities included creating awareness of Ebola pandemic, to prevent its spread including to stop eating bush meat, avoidance of intimate contacts with ill persons, and to not attend or perform traditional burials; advocating for the adoption of prevention strategies like using chlorine solution and hand washing; and distribution of buckets, chlorine, soap, hand sanitizers, and gloves. CHWs reported that they went door-to-door, visited farms to engage people while working, organized community meetings, and undertook opportunistic sensitization at community gatherings, observed patient care, and recruiting survivors to share their experiences and encourage early care seeking. These results confirm the

role of CHWs in building resilience, strengthening health systems, and in provision of emergency response capacity. (Millar N, 2018)

The importance of CHWs was equally confirmed during the Covid 19 pandemic in which CHWs remained at the central link between the community and the health facilities including surveillance, education, and support for families with COVID-19 by giving them training and protective equipment. However, the support they received varied among the countries. In Ethiopia, Bangladesh, India and Pakistan decided to use CHW interchangeably; meaning that they could attend TB/HIV cases together with Covid 19 contact tracing and educating family members during community visits (Salve S., et.al 2022).

Based on Ebola and COVID 19 pandemics, there are a number of lessons that community has learnt from CHWs involvement in emergency related issues despite of their minimal and limited skills and knowledge. This fact is confirmed in various reports on their involvement in the community during emergencies and impacted their lives across the board. Examples are numerous. When China was engulfed with small pox scourge in 1920, it was the first country to adopt the use of CHWs calling them "*Barefoot Doctors"*. Within two years the *"Barefoot Doctors*" had successfully vaccinated more than 512 million out of 600 million citizens against smallpox and enabled that country to eradicate the disease 20 years before global eradication campaign began. It demonstrated the efficacy of using minimally trained community members to deliver critical preventive care. The success of the program inspired similar programs in many countries including Bangladesh, Honduras, India, Indonesia,

Tanzania, the United States (e.g., Alaska's Community Health Aide Program) and Venezuela (Exemplars, 2022).

Therefore, CHWs managed to transform health care services provision across many countries globally. It has remained to be sustainable voluntary cadre until now to many places and communities globally. For example, a report by the Exemplars in global health in their features about 'What impact can CHWs have' shows that through them Mozambique has reduced prevalence of childhood under nutrition by 30%, Pakistan reduced (stillbirths by 35%, neonatal mortality 28% and increased delivery by skilled birth attendants for 67%) while maternity mortality rate in Bangladesh, Malawi and India dropped for 37% (Exemplars, 2022).

The above data and information from other researchers are in conformity with data collected in this study, which indicated that 21 respondents out of 40 equivalents to 52.5% agreed that there are lessons the community can learn from involving CHWs in emergency related issues due to their noted sustained outcomes at local level. While 9 of them disagreed and 10 respondents equal to 25% were in neutral position. Notwithstanding the CHWs to support government initiatives on health sector at the community level, they face myriad of challenges 19 of respondents in the study, representing 47.5% agreed that they are facing challenges in performing their duties during emergency in Tanzania; 11 respondents disagreed while 10 remained neutral.

Community health workers (CHWs) are the agents of change in easing global burden of diseases in communities they serve. However, they themselves have health risk

behavior, which predispose them to non-communicable diseases which need them to be empowered to better health services provision. There is a gap in literature detailing the challenges faced by CHWs in addressing their own health risk behaviour. Few mentioned challenges include - low patient adherence, poor communication, conducive working environment, ineffective self-management. (Johnson L, et.al 2021).

5.6 Conclusion of the chapter

The objectives of this study were to assess the contribution, competency and lessons learned from Community Health Workers (CHWs) during emergencies times, to evaluate the knowledge and skills of CHWs in dealing with emergency cases and to identify lessons that could lean to strengthen resilience on issues related to emergency given that the work of CHWs is globally recognized as vital element in primary health care and in achieving universal health coverage.

Based on study findings, CHWs are not only agents of change in easing global burden of diseases, but they are indeed “barefoot doctors” who live, work and support communities in times of stress and outbreak of communicable diseases. Likewise, the study reveals that much as governments and communities value their contributions, their basic needs- formalized training, remunerations, working gear, motivation and the like are not given top priority in the planning board rooms. As things stand now, CHWs work like orphan children with minimal support from governments, Non-Governmental Organizations and other potential donors. What is also peculiar in Tanzania is lack of clear policy and coordination mechanism across the board.

The CHWs face myriad of problems from financial support to working gear and a worked-out training program. Currently these cadres of volunteers gain skills on the job and working experience, which also explain lapses on ethics and moral issues. They also need facilitation support in communications skills, basic public health pillars, care of families in stress, counselling, interpersonal relationships, outreach skills and follow –ups, tracking – progress of families and communities in distress, documenting and reporting preparations and management skills. Knowledge is also required in the areas of immunization, nutrition and food, hygiene, sanitation and sentimental management at household and community levels. Issues of ethics and moral values are of paramount importance for CHWs. With regard to resilience on emergency related matters, there is no doubt CHWs have helped a lot in building community resilience.

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

As mentioned from previous chapter, this study aimed at assessing the contribution, competency and lessons learned from community health workers during emergencies in Tanzania,'. The conclusions are based on the purpose, research questions and results of the study. The implications of these findings and the resultant recommendations will also be explained. Recommendations are based on the conclusions and purpose of the study.

6.2 Conclusion and Recommendations

Conclusively the study was all about assessing the contribution, competency and lessons leant from voluntary cadre of CHWs during emergency in Kigamboni District Tanzania. Specific objectives were to assess the contribution of CHWs during emergencies in the study area; To evaluate the knowledge and skills of CHWs in dealing with an emergency in the study area; and to identify lessons learned so as to strengthen resilience on issues related to emergency. The guiding research questions: What is the contribution of CHWs during emergencies in Tanzania? Do CHWs have the required knowledge and skills to deal with emergencies cases? What lessons can be learned from CHWs when it comes to strengthening resilience issues related to emergency?

In the study area of Kigamboni district located in Dar es salaam city, four wards were selected out of nine which were Kibada, Mjimwema, Kisarawe 11 and Tungi

with a reason that not only being among new district but because its usually assumed CHW volunteers are located in rural areas which is not obvious, accessibility, feasibility, diversity, availability of data and key informants as well as its able to represent what is required under the study made a researcher to select this district. A researcher has also adopted positivism philosophy which open up to a researcher being neutral and avoid influencing findings. is originated from the natural sciences. Also, cross sectional design of research was used since its descriptive and enable a researcher to examine distribution of variables and enable easier data collection using both qualitative and quantitative research approach.

In order to get wide range of relevant and valid information from targeted 40 respondents (7 CHWs, 25 community members and 8 government officials) were selected using probability sampling and purposive sampling while both questionnaire for qualitative approach and qualitative interviews using developed guiding questions were applied. Documentation review used for reviewing what other researchers' have explored around or related to a topic under study that focused on assessing *the contribution, competence and* lessons learnt from CHWs during emergencies in Tanzania.

Basing on the research objectives and questions of the study, the findings have revealed that the presence of CHW in the community is acknowledged and notable during emergencies at the community level as well as those at the facilities. They are not only agents of change in easing global burden of disasters, but indeed they are important volunteers who live, work and support society at time of stress and emer-

gency. Also noting their contributions by the government as well as community who are direct beneficiaries mostly in areas with HRH shortage, their service has covered the gap. Relatively have been a bridge and coordinator between a health facility and community support services. The roles and responsibilities as presented vividly during the interviews have shown that what they are doing is complying with the national guideline health-based care program including mentioning the few: counselling, testing, education, follow-up, mentoring and supervision covering during, before and after emergency occurrence in the community. Also, these roles are well known by the community CHW serving.

Additionally, the use of this voluntary cadre CHW contributed much in building community resilience during emergency periods by enabling community or victims to adopt coping mechanism through empowerment on how to respond, withstand, adopt and recover from situation hence reduce the side effect. So, to say they are agents for change not at Kigamboni or in Tanzania but at global level as well due to the lesson leant and shared good stories from beneficiaries and the government too.

Lastly, even then CHWs in the study area face myriad of challenges ranging from financial support to working facilities, transport, remuneration and motivation. If indeed CHWs are to be included in the chain of *"barefoot doctors*" in spearheading the achievement of universal health coverage, the following recommendations should be considered and effected: The Community Health Workers (CHWs) is an important cadre in health sector although many people count their effectiveness only during

emergencies. Given their roles and duties are well defined by WHO, it is recommended as follows:

i) Recommendations for objective one: Assessing the contribution of CHWs during emergencies in the study area;

- Implementing the operational guideline 'the community-based health care services. The government has in place a National Operational Guideline for Community-based Health Care Services of 2020, which very elaboration on what should be done when involving CHWs during emergencies. Yet the guidelines are adhered to during implementation thus hindering the realization of the expected contribution to health sectors by this cadre of volunteers.
- Funding: The time has come for the government through the ministries of Health and Regional Administration and Local Government (TAMISEMI) to set aside budget that would be used to facilitate CHWs operations. This is because much as CHWs play a pivotal role in health service delivery in many areas where professional health workers are not available, this funding will support their operations, act as a motivation and buying working gear in order for them to reach their full potential. The funds can be managed by District, Municipal and City Councils Directors.

ii) Recommendations for objective two: Evaluating the knowledge and skills of CHWs in dealing with an emergency in the study area.

- Capacity Building: Given that CHWs supplements government efforts in extending health service in both rural and urban areas they need regular training to enhance their work performance and more knowledge on emergency related issues as well as low understanding to operational standard procedures like self-protection during emergency situations.
- Public Awareness: There is a need to create public awareness on the contribution of CHWs in communities. Creating public awareness would help to increase understanding of presence and activities of CHWs in the communities.

iii) Recommendations for objective three: identifying the lessons learned so as to strengthen resilience on issues related to emergency.

- Recruiting more CHWs. Since this voluntary cadre remained to sustainable to many places and communities, recruiting more of them will enable beneficiaries during emergencies to be served first and later acknowledged their lessons and good success stories. Likewise, the wider community will manage to build resilience in the sense of responding, withstanding, adopt and recover from diverse situations when happen.

6.3 The Study Contribution to the Research Gap

This study that aimed at assessing the contribution, competency and lesson leanest of CHW during emergency has managed to provide awareness and knowledge not only to the health sector rather to other stakeholders including academicians and other stakeholders about the good work done by them to the community, their competency,

challenges and success stories that can be duplicated elsewhere by multibed stakeholders. Also, the report has shown that these people are doing a lot to number of cross cutting issues and program going on to the community; it's very important their work to be appreciated and considering to value their effort in support humanitarian initiatives.

6.4 The Study Contribution to Academicians

This report of the study has managed to add more reference and literature to refer too when conducting study and lesson related to this topic under study especially reference based in Tanzania. Also, the report is going to add more knowledge and understanding what entails about connection between CHW and emergency issues as well as open up for more researching, article writing and publications on humanitarian issues related to health and emergency.

6.5 Further Research

While this study has provided an overview as far as the contribution, competency and lessons learned from community health workers during emergencies in Tanzania is concerned, much on the topic still desired. Nonetheless this study contributes to showing the importance of CHWs in responding to emergency situations. However, more studies are needed to generate more information, knowledge and the significance of CHW voluntary cadres' contributions at numerous angles of public health and humanitarian sector in Tanzania.

REFERENCES

Bezbaruah, S., Wallace, P., Zakoji, M., Padmini Perera, W. L. S., & Kato, M. (2021). Roles of community health workers in Advancing Health Security and resilient health systems: Emerging lessons from the covid-19 response in the south-East Asia Region. WHO South-East *Asia Journal of Public Health, 10*(3), 41. https://doi.org/10.4103/2224-3151.309872.

Collis, J. and Hussey, R. (2018). Business research. 4th ed. Basingstoke: Palgrave Macmillan. https://www.researchgate.net/publication/309102603_Understanding_research_philosophies_and_approaches

Community. Cambridge Dictionary. (n.d.). https://dictionary.cambridge.org/ dictionary/english/community

Emergency. Cambridge Dictionary. (n.d.). https://dictionary.cambridge.org/ dictionary/english/emergency

JHPIEGO, (2018). Developing and strengthening community health worker programs at Scale: A reference guide and case studies for program managers and policy makers. Toolkits. https://toolkits.knowledgesuccess.org/toolkits/communitybasedfp/developing-and-strengthening-community-health-worker-programs-scale.

Jolley, M. (2007). *Research Design.* Belmont: Wadsworth Cengage Learning

Keith K. (2015): The utility of community health workers in disaster preparedness, *Recovery and Resiliency, 2,* 208-225 https://journals.sagepub.com/doi/full/10.1177/1936724415587046

Kigamboni Municipal Council socioeconomic profile, (2022) https://kigambonimc.go.tz/

Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC). (2020). The Guide for Training Community Health Workers 1–75 MoHCDGEC-HP. Dar es Salaam, Tanzania.

NBS, (2022). Census information dissemination platform, preliminary results report. https://www.nbs.go.tz/index.php/en/

Ngabonziza, S. (2019). Exploration of knowledge and skills development among community health workers in Rwanda. Scholarship by the University of Western Ontario https://ir.lib.uwo.ca/etd/6656/

Nicholls, K., Picou, J. S., Curtis, J., & Lowman, J. A. (2015). The utility of Community Health Workers in Disaster Preparedness, recovery, and resiliency. *Journal of Applied Social Science*, *9*(2), 191–202. https://doi.org/10.1177/1936724415587046

Onyekuru, J. Ihemezie et.al (2022). Impacts of ebola disease outbreak in West Africa: Implications for government and Public Health Preparedness and lessons from covid-19. Scientific African. https://www.sciencedirect.com/science/ article/pii/S2468227622004173.

Perry, H. (2013). A brief history of community health worker programs - MCHIP. Retrieved April 21, 2021, from https://www.mchip.net/sites/default/files /mchipfiles/02_CHW_History.pdf.

Perry, H., & Zulliger, R. (2017). Case studies of large-scale community health worker programs. Retrieved April, 2021 from https://chwcentral.org/wp-content/uploads/2017/02/CHW-CaseStudies-Perry-2017.pdf

PO-RALG, (2021). National Operational Guideline for Community-Based Health Services. Dar es Salaam, Tanzania.

Research methods for business students (n.d.) https://www.worldcat.org/title/ research-methods-for-business-students/oclc/768041915 by Edinburgh Gate: Pearson Education limited. By Saunders, M., (2012).

Shokane A. (2016). Challenges facing operations during emergencies in South Africa Retrieved on 23/7/2021 from https://emergency.or.sa/index.hp/em/social-operations-accountability.

Sikika (2020): *Ripoti ya Pima Kadi Jamii*/ Community Score Card report in Siha and Ilala, Dar es Salaam. Retrieved on 15/02/2021 from https://sikika.or.tz/index.php/en/socialaccountabilitySikikaPimaKadireportinTemeke and on 28/4/2021 from https://sikika.or.tz/index.php/ en/social-accountability-monitoring.

Thomas, P. N. & van de Fliert, E. (1970, January 1). Participation in theory and Practice. ttps://link.springer.com/chapter/10.1057/9781137426314_3#citeas 28/4/2021.

Thomas, P. N., & van de Fliert, E. (2014). Participation in theory and Practice. *Interrogating the Theory and Practice of Communication for Social Change*, 39–51. https://doi.org/10.1057/9781137426314_3.

Understanding the terminologies: Disaster, crisis and emergency. (n.d.). Retrieved on April 24, 2023, from https://openresearch.lsbu.ac.uk/download/a1724f8775c90b32ead6740c6cf1af37371bce201eb47a054dd4a300668ec3fe/384053/ARCOM%20paper.pdf.

United Republic of Tanzania. (2000). Community Development Policy - tzonline.org. http://tzonline.org/pdf/communitydevelopmentpolicy.pdf.

Van Bortel T; Basnayake A; Wurie F;Jambai M; Koroma AS; Muana AT; Hann K;Eaton J; Martin S; Nellums LB; (2016). Psychosocial effects of an ebola outbreak at individual, community and international levels. *Bulletin of the World Health Organization*. https://pubmed.ncbi.nlm.nih.gov/26966332/

World Health Organization. (2017). *Community health worker programmes in the who african region policy brief*. World Health Organization. https://www.afro.who.int/publications/community-health-worker-programmes-WHO -african-region-policy-brief.

World Health Organization. (n.d.-b). WHO guideline on Health Policy and system support to optimize community health worker programmes. World Health Organization. https://www.who.int/publications-detail-redirect/9789241550369.

APPENDICES

Appendix I: Research Clearance Letter

THE OPEN UNIVERSITY OF TANZANIA

DIRECTORATE OF POSTGRADUATE STUDIES

P.O. Box 23409
Dar es Salaam, Tanzania
http://www.openuniversity.ac.tz

Tel: 255-22-2668992/2668445
ext.2101
Fax: 255-22-2668759
E-mail: dpgs@out.ac.tz

Our Ref: PG201900060

7th September 2021

District Executive Director (DED),

Kigamboni District Council,

P. O. Box. 36009,

DAR ES SALAAM.

RE: RESEARCH CLEARANCE

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

To facilitate and to simplify research process therefore, the act empowers the Vice Chancellor of the Open University of Tanzania to issue research clearance, on behalf of the Government of Tanzania and Tanzania Commission for Science and Technology, to both its staff and students who are doing research in Tanzania. With this brief background, the purpose of this letter is to introduce to you **Ms.KAYOMBO, Maria Salatiel, Reg No: PG201900060** pursuing **Master of Humanitarian Action Cooperation and Development (MHACD).**We here by grant this clearance to conduct a research titled **"The Contribution, Compitency and Lesson, Learned from Community Health workers during Emergency in Tanzania: The Case of Kigamboni District".** She will collect her data at your office from 8th September to 8th October 2021.

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

Yours,
THE OPEN UNIVERSITY OF TANZANIA

Prof. Magreth S.Bushesha
DIRECTOR OF POSTGRADUATE STUDIES.

Appendix II: Letter from Kigamboni District to Wards Executive Officers

HALMASHAURI YA MANISPAA KIGAMBONI
[Barua zote zipelekwe kwa 'Mkurugenzi wa Manispaa Kigamboni]

Simu: +255 22-2928468
Fax: +255 22-2928469
Barua pepe: info@kigamboni.go.tz
Tovuti: www.kigamboni.go.tz

S.L.P. 36009,
KIGAMBONI,
DAR ES SALAAM,
TANZANIA.

Kumb. Na. .....

Tarehe. 17/09/21

WEO CHUNGA, KISARAWE II
KIBADA, MJIMWEMA.
.....
DAR ES SALAAM

YAH: RUHUSA YA ~~BW~~/BI. MARIA S. KOMOMBO KUFANYA PROJECT/ FIELD/ RESEARCH KWA KIPINDI CHA KUANZIA 20/09/2021 HADI 24/09/2021

Tafadhali rejea na mada tajwa hapo juu.

Mtajwa hapo juu ni mwanachuo kutoka CHUO KIKUU HURIA, TZ ambaye amekubaliwa kufanya ~~Project~~/ ~~Field~~/ Research juu ya RESEARCH TITLE: THE CONTRIBUTION, COMPITENCY AND LESSON LEARNED FROM COMMUNITY HEALTH WORKERS DURING EMERGENCY IN TANZANIA: THE CASE OF KIGAMBONI DISTRICT katika ofisi yako kuanzia tarehe 20/9/2021 hadi 24/9/2021

Hivyo mpokee na kumpa ushirikiano kulingana na mahitaji yake.

Nakutakia kazi njema.

Kny: MKURUGENZI WA MANISPAA
KIGAMBONI

.....
Kny. MKURUGENZI WA MANISPAA
HALMASHAURI YA MANISPAA YA KIGAMBONI.

Nakala:
Mkurugenzi wa Manispaa - Aione kwenye jalada
MANISPAA YA KIGAMNONI

Appendix III: Research Questionnaire

Qualification	Tick where you belong		
Age	18-25 ( )	26-35 ( )	36+( )
Sex	Male ( )	Female ( )	
Education	Primary ( )	Secondary ( )	Collage ( )
Occupation			
Location (ward and a street)			
Any other qualification apart from the above			

i) To assess the contribution of CHWs during emergencies in the study area.

Guiding questions	**Respondents' Response**					
	Strongly Agree	**Agree**	**Neutral**	**disagree**	**Strongly Disagree**	**com-ments**
1. Kigamboni district has CHW working in the area that has contributions in the community						
2. The roles and responsibility of CHW are known to the public and CHW themselves						
3. Presence of CHW is vital in the community during emergencies in their locality and empowers them to take charge of situations; in things like disease outbreaks.						

ii) To evaluate the knowledge and skills of CHWs in dealing with an emergency in the study area.

Guiding questions	**Respondents' Response**					
	Strongly Agree	**Agree**	**Neutral**	**disagree**	**Strongly Disagree**	**Com-ments**
1. CHWS Have required knowledge on their roles and responsibility						
2. CHWS have required knowledge on Standard Operating procedures during emergencies						
3. CHWS have understanding on self-protection when working at emergency situation						
4. Community understands those roles and responsibilities as final beneficiary top CHW services						
5. There is shortage of skilled staff, limited availability of emergency care especially at night						

iii) To identify lessons learned so as to strengthen resilience on issues related to emergency.

Guiding questions	Respondents' Response					
	Strongly Agree	Agree	Neutral	disagree	Strongly Disagree	Com-ments
1. The use of CHW is helping in building community resilience especially during emergency?						
2. There are lessons that the community can abide to their involvement in emergency related issues						
3. What kind of emergency issues are involved in the community						
4. How male CHW participation is as compared to women during emergency						
5. What are challenges CHW facing when performing their duties in Tanzania						
6. There is lesson learned to due challenges facing CHWS						

Appendix V: Guiding Question for Interview

Objective 1	To assess the contribution of CHWs during emergencies in the study area. **Questions** • Is Kigamboni district has CHWs working in the area? • Are roles and responsibilities of CHW a known to the public and CHWs themselves? • Is presence of CHWs vital in the community during emergencies in their locality and empowering them to take charge of situations? i.e disease outbreaks.
Objective 2	To evaluate the knowledge and skills of CHWs in dealing with an emergency in the study area. **Questions:** • Have CHWs required knowledge on their roles and responsibilities? • Have CHWs required knowledge on Standard Operating procedures during emergencies? • Do CHWs have understanding on self-protection when working in emergency situation? • Does the Community understand those roles and responsibilities as final beneficiary CHW services? • Is there any shortage of skilled staff, limited availability of emergency care especially at night?
Objective 3	To identify lessons learned so as to strengthen resilience on issues related to emergency. **Questions:** • Is the use of CHWs helping in building community resilience especially during emergency? • Are there lessons that the community can abide to their involvement in emergency related issues? • What kind of emergency issues are involved in the community? • Are reproductive health, Maternal, new born and child health (RMNCH) services reducing maternal and newborn deaths? • Is male participation during emergency little compared to women? • What are the challenges facing CHWs when performing their duties in Tanzania? • Ii there any lesson learned from challenges facing CHWs?