SATISFACTION OF COMMUNITY HEALTH WORKER- STUDENTS WITH THE TRAINING PROGRAM AT KAHAMA AND SHIRATI HEALTH INSTITUTES IN TANZANIA

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By

Pius Stephen Chaya

A Dissertation Submitted in (partial) Fulfilment of the Requirement for the Degree of Master of Public Health of the

Muhimbili University of Health and Allied Sciences
October, 2017

CERTIFICATION

The undersigned certifies that, he has read and hereby recommends for acceptance by Muhimbili University of Health and Allied Sciences a dissertation titled: ***"Satisfaction of Community Health Worker-Students with the Training Programme at Kahama and Shirati Health Institutes in Tanzania''*** in (partial) fulfilment of the requirements for the degree of Master of Public Health of the Muhimbili University of Health and Allied Sciences.

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Prof. David Urassa

(Supervisor)

_____

Date

DECLARATION AND COPYRIGHT

I, **Pius Stephen Chaya** declare that this **dissertation** is my own original work and that it has not been presented to any other university for similar or any other degree award.

Signature..... **Date**.....

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I acknowledge that any errors, mistakes and unclear statements contained in this document solely remain my accountability.

DEDICATION

This dissertation is dedicated to my late sisters Felister Chaya and Flora Chaya. May the Almighty God rest their good souls in Peace. Amen.

ABSTRACT

Background

There is the global dearth of evidence on the satisfaction of Community Health Worker (CHWs) students trained in the formal training programmes. In Tanzania, the gaps on satisfaction of CHW students with training program have existed since the inception of the Community Based Health Program (CBHP) policy guideline.

Objective

This study aimed at assessing the level of satisfaction of CHW students with the training programme from Kahama and Shirati Health Institutes. The study envisaged specifically to assess the satisfaction of trainees with the content of the courses, relevance of the training to the job, instructors competency, teaching methodology, learning environment and the use of technology.

Methodology

The study used Kirkpatrick's Model - focusing on Level 1 to measure the satisfaction of the CHWs students with the training programme. The study employed across-sectional design with a total of 153 students pursuing the Community Health(CH) program and alumni of the CH programme who were sampled by simple random sampling, and a total of 14 tutors from Kahama and Shirati Health Institutes who were also purposively sampled. Data were collected using i) CHW survey using questionnaire-Kirkpatrick tool ii) Focus Group Discussion (FGD) with the tutors. Quantitative data were processed, edited and descriptively analysed using SPSS version 20. The likert scale (1-5) was used and computation of weighted score was done which was used to get the score and decision rule. Focus Group Discussion (FGD) data were transcribed and analysed using content analysis.

Results

The majority (66%; weighted score =4.5) were strongly satisfied with the course content and the curriculum despite the fact that the curriculum did not reflect the core need of the community health. In addition, 70% (weighted score=4.6) of the students were strongly

satisfied with the available learning environment for the course. However, in some cases, there were concerns about the use of old teaching facilities, inadequate quantity and quality of the teaching and learning materials as well as lagging behind in use of innovation in teaching and learning. In the area of the tutors' competence, most students (69%, weighted score=4.6) were strongly satisfied with their capacity to teach. However, tutors themselves had concerns about being not oriented on the new cadre and students had concerns that the objectives of the course were not thoroughly articulated by tutors. The majority (70%; weighted score=4.7) of students were strongly satisfied with the relevance of the programme. However, they were not sure about their employability.

Conclusion

It is concluded that there is strong satisfaction and motivation among the CHW students with the community health programme, in particular, the way the training is run, the competence and motivation of the tutors to teach them and the way the practical attachments are structured to give them opportunity to practise what they have learnt in the class. Despite these positive findings of the Programme, it yet is constrained by having a curriculum that does not capture all required contents, some tutors not well oriented on teaching the new programme, and inadequate use of innovative platforms such as m-learning and e-learning in teaching and learning.

Recommendation

Success of CBHP in Tanzania needs strong Public and Private Partnership. The need for curriculum review should go hand in hand with putting in place CHW recruitment and deployment systems to assure CHW employability. On-the-job training programmes for the tutors are a key to enhance their teaching skills.

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LIST OF ABBREVIATIONS AND ACCRONYMS

CBHC	Community Based Health Care
CBHP	Community Based Health Programme
CBO	Community Based Organisation
CH	Community Health
CHV	Community Health Volunteer
CHW	Community Health Worker
FGD	Focus Group Discussion
HD	Higher Degree
HIV/AIDS	Human Immune Virus/ Acquired Immune Deficiency Syndrome
HRH	Human Resources for Health
IMCI	Integrated Management of Childhood illness
MDG	Millennium Development Goals
MKUKUTA	Mkakati wa Kukuza Uchumi na Kupunguza Umaskini Tanzania
MMAM	Mpango wa Maendeleo ya Afya ya Msingi
MNCH	Maternal Newborn and Child Health
MOH	Ministry of Health
MPH	Master of Public Health
NGO	Non-Governmental Organisations
NTA	National Technical Award
PHC	Primary Health Care
RDT	Rapid Diagnostic Test
SDG	Sustainable Development Goals
SPSS	Statistical Package for Social Sciences
SSA	Sub Saharan Africa
USA	United States of America
USAID	United States Agency for International Development
WHO	World Health Organisation

DEFINITION OF TERMS

Community Health Worker

This refers to community health aides selected, trained and working in the communities from which they come (WHO 1989): Community health workers should be members of the communities where they work, should be selected by the communities, should be answerable to the communities for their activities, should be supported by the health system but not necessarily a part of its organization, and have shorter training than professional workers. However, the definition for the shorter training is not applicable for the case of Tanzania where CHWs undergo one year course training.

Trained Community Health Worker

This refers to a community health aide who has undergone a formal training based on the standardised curriculum.

Community Health Worker-Trainee

This is a student who is pursuing a one year course on Community Health or has graduated from a one year course of Community Health

Health System

This is also known as a health care system or as healthcare system, is the organization of people, institutions, and resources that deliver health care services to meet the health needs of the target populations. A good health system delivers quality services to all people, when and where they need them. The exact configuration of services varies from country to country, but in all cases requires a robust financing mechanism; a well-trained and adequately paid workforce; reliable information on which to base decisions and policies; well-maintained facilities and logistics to deliver quality medicines and technologies are the key indicators of a good health care system.

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background Information

Measuring satisfaction of the training process of Community Health Workers (CHWs) who are integrated into the formal health system cannot be ignored in this era of formalizing the Community health worker cadre. Numerous studies have attempted to measure CHW students reaction to training programmes in the context of learning and teaching environment, the content of the curriculum and it relevance to the career, tutors competence and adaptability to changing world and use of technology in the training and learning process (iHeed Institute (2013); Asnake and Tilahun (2010); Lehmann and Sanders (2004) and Lim *et al.,* (2002). In Tanzania, frontline CHW are uniquely positioned to bridge the country's critical shortage of human resources for health. Despite this potential, CHW performance is limited by weak delivery of appropriate training and re-training, unsupportive supervision and ineffective job aids.

The CHWs have increasingly been recognized as an important frontline cadre in improving access to basic healthcare services, and mobilizing community actions to address health needs is of great concern once they have graduated and deployed into the health system (Javanparast *et al.,* 2012). The Primary Health Care (PHC) approach, identified in the Alma Ata conference in 1978, has put more emphasis on the role of CHWs in addressing community health needs (WHO, 1978). Training and evaluation of CHWs is becoming one of the key aspects that generally seek to develop new knowledge and skills related to specific tasks and to increase CHWs' capacity to communicate with and serve local people across marginalized communities and underserved areas. Countries that have been delegating tasks to community level health workers have more recently been considered as a response to the global shortage in human resources for health and a key strategy to improve access to quality health services (WHO, 2008).

Massive trainings of CHWs that take place globally are driven by acute shortage of health workers. The World Health Organization (WHO) also estimates that more than 57 countries face critical health worker shortages, of which the majority (63%) is in sub-Saharan Africa (WHO, 2006), that calls for the deployment of Community Based Health approaches. Evidence also suggests that globally, about 1 billion people will never see a health worker during the course of their lives (Bhutta *et al.,* 2010) and this is still exacerbated by shortage of human resources for health. There is a current deficit of about 7.2 million skilled health professionals globally. A projection model driven by population growth would lead to a global deficit of about 12.9 million by 2035 (WHO, 2014). Global human resources for Health shortage have prompted many countries not only to adopt the integration of Community Health Workers (CHW) into health systems (WHO, 2014) but to formalize the training of the CHWs. Training of CHWs is one of the main components of the integration of CHWs into the health systems. The CHW initiatives are commonly government run and countries like Ethiopia, Gambia, Malawi, as well as other countries like Kenya, Niger, South Sudan, Tanzania, and Uganda rely entirely on for CHW training (Funes *et al.,* 2012; Giwa and Shirazi 2011). In addition, most players in CHW training in sub-Saharan Africa have been national, regional, and local divisions of MOHs, international NGOs, and local CBOs.

Historically, CHWs have been lower-skilled members of the community and are not based at a health facility. CHWs represent the primary means for people in the developing world to access health services and have the resources needed to perform their duties. Unfortunately, CHWs are not effectively trained, formalized, remunerated, or retained. Studies from various areas indicate that CHW training is inconsistent and ineffectual across both sub-Saharan Africa and South Asia (Gilson et al, 2007; Clarke et al 2008 ;). Since the inception of the CHW initiatives, the training programmes for CHWs around the world has been offered by private institutions, local governments, Nongovernmental Organizations (NGOs), and Community-Based Organizations (CBOs), and they vary drastically in duration, content, and methodology.

CHW represents an interface between health systems and communities, and so CHWs provide outreach services and help households to overcome barriers to care such as lack of access to transport, clean water, sanitation and nutrition, which are late to the social determinants of health. While there is growing evidence that CHWs can help to improve certain health outcome, research suggests that programmes often fail because of lack of support and skills (Gilson *et al.,* 2007). Evidence around the world shows that training of CHWs has been fragmented due to lack of clear formal systems. In the same analysis, the studies conducted on satisfaction of students of Community Health Course have been limited and most of them have just focused on the short term training. It is a matter of fact that assessing the reaction of CHW students on the way they perceive the training process as the first level of evaluating training programme using Kirkpatrick model is important. Javanparast *et al,* (2012) report that assessing the satisfaction of CHWs with the training programme helps to understand the way students are satisfied with methodology used, capacity of tutors, the content and curriculum, learning and teaching environment and whether the training is relevant to the job that they will assume once they graduate. It is therefore a matter of fact that if CHW students are well trained, they will eventually be highly motivated to attend training sessions and perform better in their examinations. In the same analysis, the same students are likely to have more knowledge on the subject matter and be productive in the labour market.

In Tanzania, the support on training CHWs started since independence, and there has been significant improvement on their capacity to provide services. A number of initiatives such as Mtu ni Afya campaign of 1972, the Arusha Declaration of 1967 and the Ottawa Charter of 1986 put the CBHP into a good position. All of these also supported the implementation of the Primary Health Care (PHC) initiatives. In all these initiatives, the CHW cadre though was streamlined in addressing health issues, yet received little capacity building and recognition in the employment systems. In 2000, and following the MDGs, the community based health care was still well emphasised, however, little attention was given to the training of the CHWs and their promotion.

In the same note, MKUKUTA I and II have taken care of the need for supporting the primary health care through use the CHWs. Also, the Primary Health Care Strengthening Programme (2007-2017) commonly known as *MMAM* an acronym adopted from Kiswahili words *Mpango wa Maendeleo ya Afya ya Msingi* has reiterated the need of CHW in the primary health care delivery. In addition, there has been a number of policies, strategies and acts formed to date to support the implementation of MDGs, and recently the SDGs namely Health Policy (1990, 2003, 2007), Tanzania Community Development Policy (1996), Human Resource For Health Strategic Plan (2008-2013; 2014-2019),National Information and Communication Technologies Policy (2003), Tanzania Development vision 2025, National Water Policy (2002) and Public Health Act (2009), Big Results Now in Health sector (2014), Health Sector Strategic Plan 3 and 4, National Community Based Health Policy Guideline (2014), National Community Based Heath Care Strategic Plan (2014 – 2020), Curriculum for the training of new cadre of CHWs. All these provide supportive environment towards implementation of community based health care delivery in Tanzania (MOH, 2014a, b).

Moreover, the number of Human Resources for Health (HRH) in Tanzania has dropped down to 48500 health workers, for a population of 34.5 mil people (MOH, 2012). In the same case, the health worker per population ratio was far below the recommended standard by WHO, where it stood at 1.35 health workers per population (ibid). To date, the ratio of the health worker per population is around 14.5 per 10,000 population something that is still far below the WHO recommended ratio of 22.8 per 10,000 population (MOH, 2014c). In addition, the shortage of HRH in the country stands at 52% where rural areas are mostly underserved (MOH, 2014). This shortage has necessitated countries to support the Community Based Health care programme through community health worker initiatives. However, despite the fact that many NGOs and other health stakeholders have been using the CHWs in many of their interventions, yet the type of training that they have been providing for so long has been not well coordinated. Moreover, every partner has been using different contents and curriculum to train CHWs and even there have been inconsistent systems of measuring the capacity of trained CHWs.

There are thousands of CHWs in Tanzania who have been identified and trained using non standardized approach. The 21 day comprehensive package of training of CHWS approved by Ministry of Health has been the commonly used reference approach and even before the approval of the CHW cadre in 2014. Unfortunately, this was not followed effectively by different actors in the health sector. In addition, the CHW practice has been only active in regions where there are mushrooming of NGOs. More specifically, there had been weak coordination of the CHW training in terms of standardized curricula and accreditation, remuneration and linkages to the formal health system. This has undermined the CHW sustainability and potential to address public health challenges. In 2014, Tanzania decided to nationally address these challenges by formalizing and integrating the practice of CHWs into a National CHW cadre that will be trained for nine months (1 year). Since 2014 there are more than 3000 students in health schools who pursue certificate in Community Health. Despite these efforts undertaken by the Ministry of Health and its Task Force since 2014 to date, yet there are limited studies on the satisfaction of the CHWs who are either in school or have graduated on the way the training programme has been conducted and if it is relevant to their job. This study therefore aimed at investigating the satisfaction of CHWs students and alumni with the training programme by taking the case of Kahama and Shirati Health Institutes.

1.2 Statement of the Problem

Evidence on the satisfaction of the CHW students trained using formal training programme is scanty (Msisuka *et al.*, 2011. The mushrooming efforts on the development of national community health worker (CHW) programmes in several low- and middle-income countries, Tanzania being among them has ended up coming up with planning and implementation of Community Based Health Programme (CBHP) gaps including lack of adaptation of training to support local languages (Asnake and Tilahun 2010); inconsistent delivery methods and monitoring and evaluation practices (iHeed Institute 2013); failure to deliver training in communities with CHWs practice (Partners in Health 2001); and lack of coordination on the CBHP with other service providers (Pathfinder International 2011); and low emphasis on communication skills and poor teaching methodology (Msisuka *et al.*, 2011).

Recent systematic reviews on CBHPs have further been much focused on CHWs' role in improving disease-specific outcomes (Callaghan *et al.,* 2010, Kane *et al.,* 2010, Lewin *et al.,* 2010) as well as factors affecting the implementation of CBHP for maternal and child health and most of them have been carried outside Sub Saharan Africa. Most literature review has cited inadequacy of training (Giri *et al.,* 2012; Harvey *et al.,* 2008; UNICEF Regional Office for South Asia, 2004) among CHWs being a core and common issue in most countries.

Moreover, since and even before the inception of Community Based Health programme (CBHP) by the Ministry of Health in Tanzania in 2014, most studies in Tanzania and elsewhere have been focusing on CHW retention and motivation (Mpembeni *et al.,* 2015, Strachan *et al,* 2012; Greenspan *et al,* 2013), roles (Rachillis *et al* 2016; WHO, 2007; Kaseje *et al,* 1987) while leaving satisfaction of CHWs with the training programme unattended. Inadequate data on the way students are satisfied with the training programme poses significant worries on systems and plans that could support to address any emerging issues along the course of implementing the CBHP and the one year training programme. This study was carried out to assess the satisfaction of CHW-trainees with their training programme-focusing on the way the CHWs perceives the teachers' competence, the relevance of the contents and curriculum, suitability of teaching and learning environment, the quality of the practical sessions and type of support that the CHWs receive from the tutors and the way the course is designed to take advantage of the innovation.

1.3 Rationale of the Study

This study has come at the right time since the government of Tanzania is formalizing the CHW cadre. The findings of this will help the Ministry of Health address any challenges of the new CHW programme before it gets into worse situation. This will go hand in hand with putting in place strong systems to ensure that integration of the CHWs into the formal health systems takes a smooth course. The findings will also help researchers and academicians with void knowledge related to satisfaction of CHWs on the training programme in the course of rolling out of CBH programme. The findings will also be used by schools and NACTE to design training packages and revise the curriculum and content to suit CHW needs and their labour market demand and also address some gaps that come out as a result of the first batch of the programme. Ultimately, the findings will inform further stages (Levels 2-4) of evaluating this training programme using the Kirkpatrick Model as well as help the Ministry of Health to have smooth and optimal integration process of CHWs into the formal health system.

1.4 Research Questions

1.4.1 Main Research Question

What is the degree of satisfaction of students with Community Health worker training programme relative to a course, content, instructor, curriculum, learning environment and technology use and relevance of the training to the job?

1.4.2 Specific Research Questions

1. What is the satisfaction of Community Health Worker -students with the content of the courses offered by the project in Kahama and Shirati health institutes?
2. What is the satisfaction of Community Health Worker -students with the relevance of the training to the job in Kahama and Shirati health institutes?
3. What is the satisfaction of the Community Health Worker -students with instructors' competence and teaching methodology in Kahama and Shirati health institutes?
4. What is the satisfaction of Community Health Worker -students with the learning environment and technology use in Kahama and Shirati health institutes?

1.5 Objectives of the Study

1.5.1 Broad Objective

To assess the satisfaction of Community Health Worker –students with the course content, instructors' competence, learning environment, technology use, and relevancy to job.

1.5.2 Specific objectives

a) To assess the satisfaction of Community Health worker –students with the content of the courses offered by the project in Kahama and Shirati health institutes
b) To assess the satisfaction of Community Health worker –students with the relevance of the training to the job in Kahama and Shirati health institutes.
c) To determine the satisfaction of Community Health worker –students with the instructors competency and teaching methodology in Kahama and Shirati health institutes
d) To determine the satisfaction of Community Health worker –students with the learning environment and technology use in Kahama and Shirati health institutes

1.6 Conceptual Framework

Figure 1 below illustrates the satisfaction of the students of Community Health Programme with the nine month training programme. This is level one assessment according to Kirkpatrick Model. Level 1 evaluation measures the satisfaction of the students with the course content, instructors' approach and competence, learning environment and technology and relevance of the training to the job as independent variables. The model is made up also of intermediate variables such as age, sex, type of school, schooling status and nature of school that through independent variables, the satisfaction can be determined. The dependent variable focuses on the way students are satisfied with the programme that eventually determines their attendance, performance, motivation to pursue the programme. In the same analysis, the model can be used to measure the morale of tutors on the programme and the kind of support that they are able to provide. The model helps assess the link between quality of training, and the way the process is followed up during the training. The assessment also provides for suggestions on how to improve the course and an action plan to address identified weaknesses.

Table 1 below provides a detailed description of Level 1, tools, its relevance and practicability.

Table 1: Kirkpatrick's Level 1 Description Matrix

Evaluation description and characteristics	Evaluation tools and methods	Relevance and practicability
1. Perception evaluation is how the trainers and trainees felt, and their personal satisfaction with the training or learning experience. It covers various aspects such as: i. Did the trainers/trainees like and enjoy the training? ii. Did they consider the training relevant? iii. Was it a good use of their time? iv. Did they like the venue, the style, timing, domestics, etc? v. Level of participation. vi. Ease and comfort of experience. vii. Level of effort required to make the most of the learning. viii. Perceived practicability and potential for applying the learning.	1. Feedback forms based on subjective personal perception with training experience. 2. Verbal perception which can be noted and analysed. 3. Post-training surveys or questionnaires. 4. Online evaluation or grading by delegates. 5. Subsequent verbal or written reports given by trainees to their managers/supervisors at their work place	1. Can be done immediately the training ends. 2. Very easy to obtain Satisfaction feedback 3. Feedback is not expensive to gather or to analyse for groups. 4. Important to know that people were not upset or disappointed. 5. Important that people give a positive impression when relating their experience to others who might be deciding whether to experience the same.

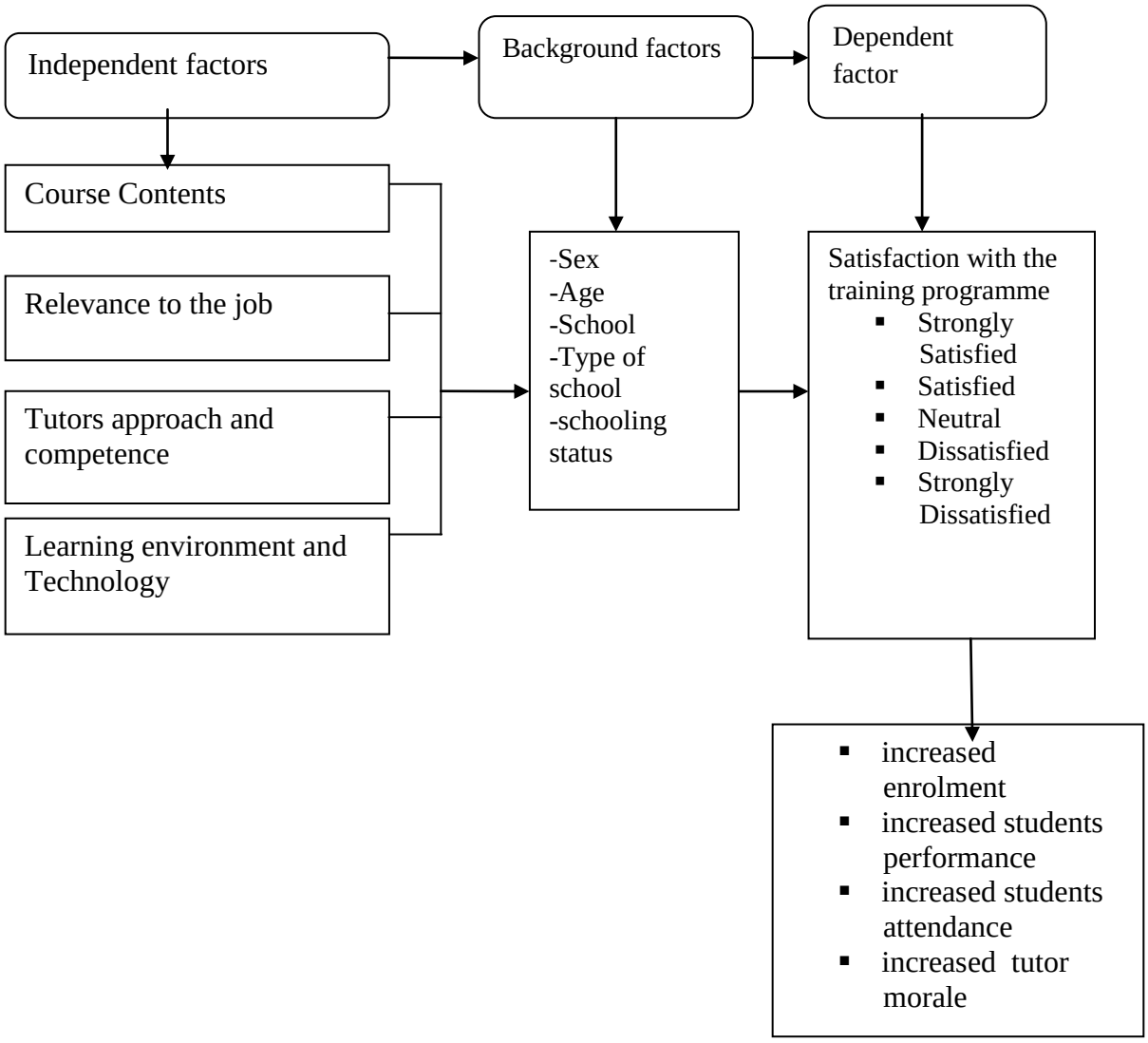

Figure 1: Conceptual Framework on the Satisfaction of Community Health Worker - students with the training Program

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Overview

This chapter is about the concepts, theories and empirical evidence underpinning the study on the satisfaction of trainees with the Community Health training programme. The chapter also presents and narrates the theories related to CHW training programme and the course of assessing its effectiveness. The empirical evidence from the trainees is drawn to inform the data collection and it shapes the conceptual framework. The same review will be used during discussion of findings to compare and make informed conclusion and recommendation based on the lessons learnt and best practices.

2.2 Concepts of CHW

2.2.1 Who are the CHWs

According to WHO (2007), the concept Community Health Worker (CHW) embraces a variety of community health aides selected, trained and working in the communities from which they come. The traditional definition of Community health workers had the following contents- should be members of the communities where they work, should be selected by the communities, should be answerable to the communities for their activities, should be supported by the health system but not necessarily a part of its organization, and have shorter training than professional workers. Kapheim, and Campbell, (2014) reported that, The American Public Health Association defines a Community Health Worker as *"...a frontline public health worker who is a trusted member of and/or has an unusually close understanding of the community served. This trusting relationship enables the CHW to serve as a liaison/link/intermediary between health/social services and the community to facilitate access to services and improve the quality and cultural competence of service delivery. A CHW also builds individual and community capacity by increasing health knowledge and self-sufficiency through a range of activities such as outreach, community education, informal counselling, social support and advocacy''.*

Therefore, CHWs have received different names and may be unique to the context in which they work (such as ASHA or *Angwanwadi* workers in India, *Promotores* in Latin America, Lady Health Workers in Pakistan, or Health Extension Workers in Ethiopia) (Jackson and Parks, 1997). These workers commonly worked in communities (almost always outside of fixed health facilities) with some type of formal, but limited, training for the tasks they are expected to perform. The training has been arranged by the health system or health programme which sponsors their work. They did not however, receive any formal professional or paraprofessional certificate or tertiary education degree.

World Vision (2015) defines the community health worker (CHW) as trained personnel to provide the most essential lifesaving interventions such as emergency front line care and can save children's lives from many if not most of the major preventable child mortality causes like diarrhea, pneumonia and malaria.

2.2.2 Roles of the CHWs into the Health System

Critical shortages in the health workforce in many developing countries - specifically the number, skills and geographic distribution of health workers - pose a significant challenge to the achievement of universal health coverage and the Sustainable Development Goals (SDGs). Increasing attention has therefore been focused on the potential of community health workers (CHWs) to expand access to essential health services, particularly in low- and middle-income countries.

Liu et al., (2011) report that CHWs can perform a wide range of tasks depending on the context and type of project. At some point cases, CHWs have done home visits, environmental sanitation, provision of water supply, first aid and treatment of simple and common ailments, health education, nutrition and surveillance, care (i.e. counselling, peer and treatment support and palliative care), malaria control, treatment of acute respiratory infections, communicable disease control, community development activities, referrals, record keeping and collection of data on vital events, (Perry, 2012; 2014). There are still debatable concerns that what functions individual CHWs can effectively perform, considering the level of education, type and

duration of training, health needs of the community and size and geographical spread of the population to be covered. CHWs also equip families with the knowledge and skills to prevent disease. They support in promoting good nutrition, sanitation, and hygiene, and link families to essential services (World Vision, 2015).

2.3 Theoretical Review

This section provides highlight on the theories supporting the study on the satisfaction of students with the Community Health training programme. The study reviews Kirkpatrick Model and other approaches of CHW training so as to inform the methodology and later on the findings and discussion.

2.3.1 Kirk Patrick Model

The use of Kirkpatrick's (1976) framework in evaluating training has received popularity since 1950s. Despite being old, this model is still working very well in evaluating training programmes across the world.

Kirkpatrick's model remains to be the best framework or conceptual model developed to guide conduct of training evaluations, the first and most commonly referenced framework to date is the Kirkpatrick model (Bates R, 2004, .Alliger G, et al 1997, Omar M,et al 2009 and Morgan R, et al 2000). The Kirkpatrick model identifies four levels of training outcomes that can be evaluated: reaction, learning, behavior, and results (Kirkpatrick, 2006). The reaction level assesses how well trainees appreciated a particular training programme. In practice, evaluators measure trainees' affective response to the quality and the relevance of the training programme when assessing reaction. The learning level assesses how well trainees have acquired intended knowledge, skills, or attitudes based on participation in the learning event. It is usually measured in the form of tests. The behavior level addresses the extent to which knowledge and skills gained in training are applied on the job. Lastly, for the results level, evaluators try to capture the impact that training has had at an organizational level. This includes changes in health outcomes.

Level one includes assessment of training participants' satisfaction with training programme in terms of the contents, tutors capacity, learning environment, and use of technology. Kirkpatrick (1959) originally discussed satisfaction in terms of how well participants liked a particular programme. Studies by Bates (2004), on the critical analysis of evaluation practice: the Kirkpatrick model and the principle of beneficence, Evaluation and programme planning depicted that Kirkpatrick's model has served as the primary organizing design for training evaluations in for-profit organizations for over thirty years. The model has the following advantages: First, the model addresses the need of training professionals to understand training evaluation in a systematic way (Shelton & Alliger, 1993). Second, Kirkpatrick insists that information about level four outcomes is perhaps the most valuable or descriptive information about training that can be obtained. Finally, the popularity of the four-level model is also a function of its potential for simplifying the complex process of training evaluation. The model does this in several ways. First, the model represents a straightforward guide about the kinds of questions that should be asked and the criteria that may be appropriate. Second, the model reduces the measurement demands for training evaluation.

Despite its advantages, the model, however, has got the following limitations: There are at least three limitations of Kirkpatrick's model that have implications for the ability of training evaluators to deliver benefits and further the interests of organizational clients. These include the incompleteness of the model, the assumption of causality, and the assumption of increasing importance of information as the levels of outcomes are ascended (Cannon-Bowers & Salas, 1997). Specifically, Kirkpatrick (1977) reports that the usefulness of stage one evaluation depends upon the honesty of the learners who complete the questionnaire and feel comfortable to tell the truth about the programme whether it has been successful or not. There is also the potential issue of social desirability whereby the learners feel that they have to respond in a particular way (Darby, 2006) especially if they are asked to complete their evaluation in front of the trainer or fellow learners. There is also a risk that the evaluation focuses too heavily on enjoyment rather than on how useful the training has been to them (Hamblin, 1974) which is most frequently in the form of 'happiness sheets (Bramley and Kitson, 1994).

2.3.2 Approaches to CHW Training

There are many approaches to CHW training which range from short term courses to long term certificate programmes. For instance, the CHWs in Brazil receive an 8 week residential course that includes curative, preventive and promotive components, 4 weeks of fieldwork followed by on-going training sessions (WHO and GHWA, 2010). In Thailand, CHWs are trained for 7 days on the concepts of PHC, disease prevention and basic curative tasks followed by on-the-job training for 15 days (ibid). Training content varies significantly by the educational qualifications of CHWs and the required competencies for their roles and responsibilities, ranging from use of nationally-produced training modules to locally tailored curricula, residential courses or mobile training teams. Various forms of distance education have also been trialed to provide CHW training, although limited access to technology and low ITC literacy have been barriers to distance training in many developing countries such as Kenya (Department of Health and Human Services, 2006). In Tanzania, training of CHWs who have been volunteers was taking place in different approaches such as 21 days, 3 days etc. Most of these approaches in Tanzania depended on the capacity of the organization. In addition, there had been no coordination and clear curriculum to train CHWs in Tanzania for so long until recently when the CHW cadre was formalized and integrated into the Health system (MOH, 2014)

2.4 Empirical Review

2.4.1 Satisfaction of CHWs Students with Content of the Courses

Studies by iHeed Institute (2013) and Asnake and Tilahun (2010) report that curricula for CHWs vary widely, partly due to the nature of the training and most of these training to CHWs are either refresher training (to review content) and new content Training may be comprehensive or focused on a specific disease or treatment method. In Tanzania, Ethiopia and Kenya, most common content areas have been on malnutrition, maternal and child health, family planning, infection prevention, malaria diagnosis, hygiene and sanitation, mental health, gender-based violence, female genital cutting, vaccinations, acute respiratory illnesses,

diarrhoea, HIV/AIDS, Smartphone communications, record keeping, and referral practices (Asnake and Tilahun 2010).

Surprisingly, the CHW programmes in SSA have varied for quite some time in terms of the quality, length of time for training as well as lack of clear guidance and curriculum. In some countries, the course has been shorter such as three hours (Partners in Health 2001) or as long as 10 days and in Tanzania, the course has been for 21 days, though due to poor coordination, some NGOs managed to do in fewer days to save time and costs (MOH, 2014b).

Furthermore, the CHW training has been fragmented. On this particular aspect, Lehmann and Sanders (2004) report that Nigeria's in-service CHW training programme occurs once per year, and Partners in Health (2001) indicates that in-service training in Malawi and Rwanda takes place once per month. With such mushrooming of diversity of programmes and providers of in-service training in sub-Saharan Africa, CHWs may receive multiple, disjointed, and sometimes redundant training courses. The study by Minnesota International Health Volunteers (2004) and Pathfinder International (2005, 2011) report that the CHW programmes in some countries have been shorter in duration focused primarily on teaching CHWs a single intervention, such as the use of RDTs for diagnosing malaria, trainings that are longer in duration appear to be more comprehensive, covering a range of skills and techniques such as MNCH, HIV/AIDS, primary health care, record keeping, and communication. In most of these areas, the teaching methods have been like blended learning, lecture, simulations, role playing, job aids, and question-and-answer sessions (Lim et al., 2002).

In Asia regions, CHW training and its curricula has also some variations. Studies conducted by UNICEF (2004) show that curricula for in-service training are highly variable in Nepal and India, with Nepal's in-service training curriculum including refreshers on Integrated Management of Childhood Illness (IMCI), acute respiratory illnesses, diarrheal diseases, and vitamin A deficiency. Armstrong *et al.,* (2011) report that training, conducted by Gramina Abrudaya Seva Samstha, a local NGO, included a review of mental health disorders, mental health first aid, mental health promotion, and practice-based skills.

2.4.2 Satisfaction of CHW students with the Relevance of the Training to the job

There is evidence that evaluating the training programmes is an underemphasized but critical aspect of the success of Community Health Volunteer (CHV) programmes. There is strong evidence that training programmes increase skills and confidence among CHWs and have direct impacts on outcomes (However, programmes vary widely; researchers who coded literature examining the selection and training process of CHWs found significant heterogeneity in the quality and intensity of training programmes). Evidence suggests that the characteristics of the trainee's personality directly affect the training process and training transfer (Ford et al., 1992; Warr *et al.,* 1999). The ability of the person to learn, synthesize, and connect what he has learnt to practise and transfer the skills and knowledge to work is the second factor for training transfer (Robertson and Downs, 1979). Previous studies have identified the following trainee characteristics as affecting training transfer:The motivation of the person to learn and transfer the skills to his work (Facteau *et al.,* 1995; Kontoghiorghes, 2002); his satisfaction of opportunities to apply the new skills and his personal career goals (Kontoghiorghes, 2002); the satisfaction of the trainee regarding the management of his career goals through training (career utility), as well as the goals directly connected to his work (job utility) (Clark *et al.,* 1993); and organizational commitment (Facteau *et al.,* 1995; Kontoghiorghes, 2002). Evidence posits that researches on the satisfaction of the trainees themselves as participant perspectives can increase understanding of the training and identify improvements.

2.4.3 Satisfaction of CHW Students with the Instructor's Competency and Teaching Methodology

Studies by Asnake and Tilahun (2010) on analysis of the teaching methodology of VHWs programme in Ethiopia reveal that five-day training was split between didactic and interactive techniques, with two days spent in the classroom and three days in a clinical practicum. Despite the fact that most of the researchers recommend this approach, as it balances teaching methodologies, yet in some countries, like Tanzania, studies on such kind of approach has not received attention.

In Asia, training of CHWs has received significant government support. Evidence by UNICEF Regional Office for South Asia (2004) suggests that in-service training in India and Nepal is provided by governments, NGOs, or a partnership between the two. Because these countries have national CHW programmes, the key players in CHW in-service training appear to be national and local governments. However, the duration of training has also differed with shorter duration of in-service programmes being conducted in Nepal, as refresher courses for all CHWs, whereas longer training covering new content was found in India (ibid).

Studies on the effectiveness of CHW programme seem to be limited. Study by Msisuka *et al.,* (2011); report that there is increase in CHW competency after the completion of at least one in-service training programme. Evidence from the study on pre-post test conducted in South Sudan on CHW programme by Nelson *et al.,* (2012) show a drastic increase in CHW competency in the MNCH programme. In addition, the Post-test data suggested that competency increased significantly (by approximately 60%), but the three-month post-test scores indicated that levels dropped by 20%. Similar study of and Rapid Diagnostic Test-RDT in-service training in Senegal yielded similar results: upon completion of training, CHWs scored well on post-tests, but by the three-month follow-up, their scores had decreased dramatically (Msisuka *et al.*, 2011).

2.4.4 Satisfaction of CHW Students with the Learning Environment and Technology Use

Studies on the satisfaction of CHW students with learning, teaching and even use of technology in the delivery are limited. However, a recent study by Li *et al.,* (2008), reports that trainings that take place in the facilities where there is necessary learning and teaching materials and facilities, which in turn increase significantly the satisfaction of students with the training. Also use of ICT in teaching and learning is still limited due to the fact that majority of CHWs are in rural areas and except for countries that have adopted the formal CHW training, where trainings take place in centres or schools.

The existence of specialized training centres, managed by the district health system, has been perceived as an effective way in delivering comprehensive training for CHWs. The study by Lehmann et al (2007) suggests that climate of the training organization, trainer-trainee relationship and the norms of the training groups are as important as the acquisition of knowledge in motivating and stimulating CHWs to learn and apply certain skills. Residential pre-service training at district level is perceived influential in building the relationship between students and trainers as well as providing the opportunity for closer supervision and student assessment. However, this may not be applicable in all settings as the ideal location for CHW training varies in different countries depending on funding, support system, facilities and the broader socio-cultural context (Lehmann et al;2007 and Li et al; 2008).

2.5 Knowledge Gap

This study intended to assess the satisfaction of CHW students with the training programme as only level 1 of the Kirkpatrick's Model. Despite the fact that similar studies have been done in Pakistan, Nepal, Ethiopia, South Sudan, Brazil and India, evidence of the satisfaction of CHW students who have been integrated into the formal training are scarce. In Tanzania, since 2014 when the CBHP was officially approved, more than 3000 candidates have joined the course on Community health for year one. Despite this big number of enrolment, yet evidence on the current satisfaction of CHWs students with the training is still missing.

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the study area, study design, study population, sampling and sample size. In addition, the chapter explains the sample size calculation, inclusion and exclusion criteria, and plan for the recruitment of research assistants. Finally, this chapter provides the plans for the pre testing of tools, data collection techniques and tools and variables of the study.

3.2 Study Area

3.2.1 Selection of the Study area and Justification

This study was carried out in two institutes and covered 230 CHW students who were in year 1 and those who had graduated (out of school). The researcher decided to choose two institutes namely Kahama (Public) and Shirati (Private) from Lake Zone due to the fact that there had been more promotion of update of Community Health Course by actors in Lake Zone. It is expected that, those from Lake Zone are more informed about the CHB programme compared to those in other Zones in the country. In addition, most of the donors are supporting students for the scholarship from Lake Zone compared to other regions and Kahama and Shirati have been receiving some CHWs who are under the sponsorship scheme (Kahama Institute Database, 2016; Shirati Institute Database, 2016).

3.2.2 The Profile of the Training Institutions

Kahama Training Institutes

Kahama School of Nursing is one of the government Health Institutions run by the Permanent Secretary, Ministry of Health, Community Development, Gender, Elderly and Children. It offers National Technical Award (NTA) level 4 Technician Certificate in Community Health and NTA Level 5 Technician Certificate in Nursing upon completion of two years. The school is fully registered and accredited by NACTE. Currently, the school has the capacity of

accommodating 120 students at a time. It was established in 1976 by the government with the aim of training Maternal and Child Health Aides (MCH Aiders), their primary roles was to provide health services to mothers and children in the rural areas. Pre services students were enrolled. In 1994, the school was upgraded to Public Nursing School. Again in 2005, it was changed from Public Health Nursing School to Nursing and Midwifery School. The institute has 12 staff of whom 8 are academic staff and 4 are supporting staff. In 2015/206, the institute enrolled 54(27M, 27F) students for the CH programme while in 2016/2017, 28(7M, 21F) students were enrolled to the CH programme.

Shirati College of Health Sciences (SCHS)

Shirati College of Health Sciences (SCHS) is located in Mkoma village in Rorya District within Mara Region. It belongs to the Mennonite church which has its central office in Musoma. The college is attached to Shirati Hospital (SH). The college was established in 1959, by Missionaries who were working with the Mennonite Church in Tanzania. It started enrolment of first intake in January 1960, with enrolment of 13 students; the college has a capacity to accommodate more than 200 students at a time. To date the college runs four courses as follows-Certificate in Nursing, Ordinary Diploma in Nursing, and Upgrading Diploma through e-learning (in-service) and Basic technician Certificate in Community Health. There are 10 tutors and 3 clinical instructors. In 2015/206, the institute enrolled 50(24M, 26F) students for the CH programme while in 2016/2017, 21(12M, 9F) students were enrolled to the CH programme.

3.2.3 Courses offered and CH curriculum Structure

The Basic Technician Certificate in Community Health (NTA Level 4) is one year programme. The following are the courses offered on face to face basis. In addition, there is a practical component where students go to the community or health facility to practise whatever they have learnt.

First Semester modules include:

- Fundamentals of Communication and Customer Service
- Infection Prevention and Control
- Management of Health Care facility Environment
- Basic Computer Application
- Basics of Citizenship and Gender
- Basics of Management Information System
- Basic Life Support Skills

Second Semester modules include:

- Fundamentals of Social Work Practice
- Prevention and Control of Diseases
- Community Based Reproductive, Maternal and Child Health Services
- Community Based Health Promotion
- Home Based Care
- Basics of Entrepreneurship and Life Skills
- Managing the Deceased at the Health Facility and Community

3.3 Study Design

The study used cross sectional design to collect data only once at a point of time among the CHW students and alumni (Kothari, 2006). This design was chosen since it was capable of describing the characteristics of units of inquiry and be able to compare them.

3.4 Study Population

This study covered 193 CHWs in the two institutes apart from those 20 used in the pre testing from Kahama for on-going CHWs. There were 114 CHWs and 99 CHWs enrolled at Kahama and Shirati respectively who were in school and those who had graduated. Out of these, 42 and 70 students had already graduated from Kahama and Shirati Institutes respectively, while 72 and 29students were in the first year of study for Kahama and Shirati respectively. The study also covered 16 tutors, of whom 8 came from each institute.

3.5 Sampling and Sample Size

For the students to participate in quantitative part of the evaluation, a simple random sampling was used whereby the sampling frame for this was the list of all CHW students except those picked for pre testing at the respective school arranged in serial order. For quantitative data, sampling used the target population of 193 active students in two schools to estimate sample size without the pre testing units. The formula proposed by Kothari (2006) for the estimation of sample size for simple random sampling was proposed.

$n = N/1 + N(e)^2$

Where: n = Sample size; N=Sampling frame

e= Desired precision of 5% (0.05).

Thus, $n=193/1+193(0.05)^2 =139$

After adjusting for non-respondents by using the formula n * 10/100, that gives 139 *10/100. Thus the sample size was adjusted to a minimum sample size of 153 of CHW students and graduates in the two institutes. In order to get the sample size in each school, the proportion from each school was calculated based on the number of students in the school. For instance for Kahama, the sample size was 114/213*153=82 while for Shirati was 99/213*153=71

Table 2: Summary of Sample for every School

School	Total # of active students	Sample size	In school	Out of school
Kahama	114	82	28(7M,21F)	54(27M,27F)
Shirati	99	71	21(12M, 9F)	50(24M, 26F)
Total	**213**	**153**	**49(19M, 30F)**	**104(51M, 53F)**

The sampling interval for the students was computed based on the fact that the list of the students was known i.e 213/153=2, so two students were skipped in the sampling based on the register of students who were serially ordered. Since the CHW out of schools are difficult to trace, the study used the list and contacts of graduated students from the school. The telephone interview was used to get the CHW alumni satisfaction on the programme. In case the mobile numbers provided by the schools were not reachable, the researcher used the contacts of their classmates to trace them.

3.5.1 Sampling School Administrators

In order to triangulate the study findings, the study sampled purposively 8 tutors from each school to be part of the study. The tutors to be sampled are those who are engaged in the training programme of Community Health.

3.6 Inclusion and Exclusion Criteria

In order to decide whether each of the unit should be part of the study or not, the following criteria were considered:-

3.6.1 Inclusion criteria

- Students had completed at least one semester of their training and are in school or have graduated.
- Being a CHW student from both Kahama and Shirati His.

3.6.2 Exclusion Criterion

- Those who were not taking Community Health course

3.7 Recruitment and Training of Research Assistant

Data collection was carried out by 5 research assistants. Prior to data collection, the researcher trained the 5 research assistants for one day on issues related to data collection, sampling and on how to ensure quality data from the field. In addition the research assistants were taught on how to conduct telephone interview to avoid biases and ensure that they were speaking to the right respondent.

3.8 Pre Testing

In order to ensure that validity and reliability of data were achieved, the study pre-tested the tools prior to data collection. The pre testing ensured that data collected were true (valid) and that data were consistent (reliable) (Kothari, 2006). This was done in Kahama HI with 20 CHWs student where 10 were in school and 10 graduates. The results of the pre testing informed the study and hence smoothed the comprehensive data collection. The 20 students were not included in these study findings and in the computation of the sample size of the comprehensive data collection.

3.9 Data Collection Methods and Tool

The study collected primary data from the students, and graduates. The quantitative data were collected through self-administered interview while using structured questions for Kirkpatrick Model data collection tool while qualitative data were collected using focus group discussion (FGDs). The details of each method are as follows:-

3.9.1 Structured Interview /Survey

The study used face to face interview and adopted the Kirkpatrick model for level 1 data collection tool or questionnaire that was self-filled in by the CHW students themselves who were at school. For CHWs who had already graduated, the researcher used telephone interview, where contacts for each sampled student was shared by the principle and verification questions were asked before commencing the filling of the questionnaire. The telephone interview had lots of challenges including internet challenges as well as missing some of the respondents. In order to address these, alternative contacts were sought from friends who were in the list and for internet connectivity, the enumerator used alternative mobile operators.

3.9.2 Focus group discussion (FGD)

The qualitative data from tutors were collected using the FGD with an aid of the FGD guide. This was meant to qualitatively complement the questionnaires from the perspectives of the tutors and was designed to measure levels of satisfaction, but also to tease out what facets of the course are either more, or less effective. This FGD also provided an opportunity to evaluate the perspectives of the administrators towards the course materials, the environment, and the roles of the administrators. Since the discussion is time consuming, a sample of administrators was selected (Eligibility criteria for participation will be fluency in Swahili and readiness to give informed consent. Each focus group discussion had up to 6-8 participants. A total of 2 FGDs were conducted (one in each school comprising tutors). All of the FGDs were recorded and transcribed; the leaders of the FGD took detailed notes to aid them through navigating the transcriptions.

3.10 Variables

The study had the following variables.

Table 3: The Variables of the Study

Sn	Variable	Definition	Coding
1	Satisfaction of CHWs to the training program	The feel of satisfaction of CHWs to the training programme	1= Positive 2= Negative
2	Contents of the course	The way the course content is designed to suit the students' demand for knowledge and skills	Likert scale(1-5)
3	Relevance of the course to the job	The way the students perceive the training if adds value to their job expectations	Likert scale(1-5)
4	Tutor competence	Tutors' capacity, motivations and calibre to deliver the course	Likert scale(1-5)
5	Teaching methods	Different mix of methods in delivering the course tailored made to the students demand	Likert scale(1-5)
6	Learning environment	Teaching environment for students to be able to get knowledge and skills	Likert scale(1-5)

3.11 Ethical Consideration

This study has limited cases of ethical considerations. However, in order to monitor issues of confidentiality and consent to participate in the data collections, the consent form was designed and handled to the respondents to sign before they participated in the study. In addition, the researcher sought for the clearance form from the MUHAS before embarking on data collection. The researcher also requested permission from the respective institutes before embarking on data collection.

3.12 Limitation of the Study

The study faced a number of limitations including 1) Respondents demanded for money for them to participate in the study 2) CHW students were not in the institution thus necessitating the researcher to use telephone interview. To address these limitations, the researcher clarified the importance of the study to the respondents in advance and in case CHWs were not in the institute, the researcher used telephone interview but proceeded by verification questions to address biases from interviewing the wrong person.

3.13 Data Processing and Analysis

3.13.1 Data processing

Prior to data analysis, data were cleaned by the researcher while still in the field. Thereafter, data from questionnaire were entered into SPSS amenable for analysis. Quantitative data were classified and organized according to institute in order to make comparison association to other demographic characteristics. Moreover, completeness and consistency of data were inspected so as to rectify missing information and any outliers. For qualitative part, data from focus group discussion were transcribed and coded. Transcription was done by experienced transcriptionists. Data coding and analysis were facilitated by the use of Nvivo 8, a computer software package specifically designed to manage, search, and retrieve qualitative data.

3.13.2 Data analysis

Weighted Score or Mean

Quantitative data were analyzed by SPP version 20. The Likert Scale of 1-5 was used and it was divided into 1- Strongly Dissatisfied (SD), 2- Dissatisfied (D), 3-Neutral (N), 4-Satisfied(S) and 5-Strongly Satisfied (SS). Descriptive analysis was performed to get weighted score/mean and percentages. The cut-off point was 3 and above this then implied that students were satisfied with the programme based on the parameters of interest such as content, learning environment etc and the magnitude of satisfaction tended to increase based on the scale such that 4 satisfied denoted and 5 strongly satisfied. In addition, any weighted score above 4.5 was rounded off to 5 and vice versa was true.

The step wise approach for the computation of weighted score as from Likert scale 1-5 (Kothari, 2006) was as follows:

Step 1: Decide on the size of the likert scale, let say 1-5(LS-D, SD, N, S, SS)

Step 2: Find out the responses for each satisfaction aspect for each respondent (F)

Step 3: Multiply the sum of the aspect with the likert scale for each aspect (LS*F)

Step 4: Sum the product in step 3(sum of LF*F)

Step 5: Divide the sum in step 4 with the total of the frequencies of the parameters of interest to get the weighted score(Sum of LF*F /Sum of F)

Step 6; Find the overall weighted score for the training aspect eg Content, learning environment etc by finding the average of all individual weighted score(Sum of weighted score/ Number of aspects).

Step 7: Decide on the decision rule as per Likert scale of 1-5

Strongly satisfied=5, Satisfied=4, Neutral =3, Dissatisfied=2, Strongly dissatisfied =1: In case the Weighted score are in decimals, the following decision rule and cut off points were used: 3=Neutral; Less than or equal to 1 =strongly dissatisfied; 2-3 =Dissatisfied; At least 3 to 4 =Satisfied; At least 4 to 5 =Strongly satisfied.

Frequencies or Counts

Frequency Tables were employed in order to meet research objectives and measure participants' satisfaction to learning experiences for course, content, instructors' capacity and relevance to job as well as learning environment for students. Again, demographic characteristics and other factors (age, sex, marital status, employment and support from the employers for students who had worked as CHW before) were analysed.

Content Analysis for Qualitative Data

The qualitative data from FGDs were transcribed. Transcripts were carefully read to identify themes, followed by summarizing and regrouping the data and interpreting them looking for similarities and differences and describing them. Data analysis started during data collection procedures, by reading the transcripts and discussing the data with the research team. At the

end of the data collection, transcripts were finalized and the research team analyzed them. Data were analyzed using content analysis with the aid of matrices.

3.13.3 Result Presentation and Dissemination Plan

The results of this have been presented in forms of Tables with weighted scores and percentages of variables of interest. Some results have been presented in text format particularly those from FGDs. The results dissemination plan will be prepared in which various media such as in international conferences, publication of paper and abstracts in journals, presentation in Ministry of Health Technical Working Group and in Council Health Management team meetings will be used.

CHAPTER FOUR

4.0 PRESENTATION OF RESULTS

4.1 Overview

This chapter presents the findings of the research that was conducted to study the satisfaction of CHW students with the training programme. The findings are divided into a number of areas namely demographic characteristics of the respondents, satisfaction of the students with content, tutors' competence, relevance of the programme and the technology used.

1.2 Demographic Characteristics of the Respondents

4.2.1 Community Health Course Students

Table 1 below presents findings on the demographic characteristics of the students who were pursuing Community Health Course in two health institutes. There were 53.6 % (n=82) and 46.4 % (n=71) students contacted from both Kahama and Shirati health institutes respectively. Gender wise, 44 % (n=78) and 56 %(n=85) of the respondents were males and females respectively. Also, in terms of age, 92.2 % (n=141) and 7.8 % (n=12) had ages ranging between 16-24 years and 25-30 years respectively. In terms of whether the respondents were in school or had graduated, the findings show that 32 % (n=49) and 68 % (n=104) of the respondents were in school and those who had graduated respectively. On the basis of those still in college, 57 % (n=28) and 43 %(n=21) of the respondents were from Kahama and Shirati institutes respectively. For those who had graduated, 51 %(n=54) and 49%(n=50) of the respondents were from Kahama and Shirati institutes respectively.

Table 4: Demographic Characteristics of the Respondents(N=153)

Sn	Demographic variables	Frequency(N=153)	Percent
1	Type of institutions		
	Government	82	53.6
	Private/FBO	71	46.4
	Total	**153**	**100**
2	Name of school		
	Kahama	82(34M, 48F)	53.6
	Shirati	71(36M, 35F)	46.4
	Total	**153**	**100**
3	Gender		
	Male	78	44
	Female	85	56
	Total	**153**	**100**
4	Age of Respondents		
	16-24	141	92.2
	25-30	12	7.8
	Total	**153**	**100**
5	**CHW in school and graduate**		
	In school	49	32
	Graduated	104	68
	Total	**153**	**100**
6	CHWs -Kahama		
	On-going (sex)	28(7M,21F)	**34**
	Graduated (sex)	54(27M,27F)	**64**
	Total	**82**	**100**
7	CHWs –Shirati		
	On-going(sex)	21(12M, 9M)	**30**
	Graduated (sex)	50(24M, 26F)	**70**
	Total	**71**	**100**

4.2.1 Community Health worker Course Tutors

This study conducted 2 Focus Group Discussions to 14 Tutors on their satisfaction with the training programme. Out of these, 7 were from Kahama and 7 from Shirati Health institute respectively. Gender wise, 64 % (n=9) of tutors were males and 36 %(n=5) of them were female tutors from the two institutes inclusively (Refer to Table 4.2).

Table 5: Tutors who Participated in the Focus Group Discussion (FGD)(N=14)

Sn	Demographic variables	Frequency (N=14)	Percent
1	Name of school		
	Kahama	7	50
	Shirati	7	50
	Total	**14**	**100**
2	Gender		
	Male	9	64
	Female	5	36
	Total	**14**	**100**

4.3 Satisfaction of CHW Students with the Content of the programme

Using a five point Likert scale(1-5) it was found out that the weighted score for the satisfaction of CHW students with the content of the programme was 4.5 (Table 6-1). This means that most of the students were strongly satisfied with the CH programme content. Using specific parameters of the content, it was found out that most of the students (66%) were strongly satisfied with the course content of the programme,(Table 6-1). To be specific, 64.1% (weighted score=3.3) and 83% (weighted score=5) of students were strongly satisfied with the fact that the course content was well prepared to present the needed theories and included critical issues currently occurring in the community. In the same analysis, results show that 71.9% (weighted score=4.7) and 75.8% (weighted score=4.7) of the respondents had the opinion that the course content managed to significantly present materials that could be applied and the curriculum itself was provided to students as a reference document

respectively. In addition, 54.2 % (weighted score=4.5) of the students reported that the course content was well prepared to enhance learning and 69.9% (weighted score=4.7) of the students were strongly satisfied with the content since it was prepared to support or address critical issues in the community. On the other note, the study found out that about 64.1 % (weighted score=4.6) of the students had strong opinion that the course content was well structured to add value in terms of the needed skills. It is only 42.5 %(weighted score=3.9) of the students who were satisfied with the materials provided during learning.

Table 6-2 reports that out of 21 students who were from Shirati institute, 71.4 %(n=15) were satisfied with the programme while 28.6% (n=6) were strongly satisfied with the programme. For those who had graduated from Shirati 52% (n=26) were strongly satisfied with the programme, 38% (n=19) were satisfied while the rest were not satisfied. In Kahama, for those still in college, 61.1 % (n=33) were satisfied, 3.7%(n=2) were strongly satisfied, 29.6%(n=16) were dissatisfied and only 5.6% (n=3) were strongly dissatisfied with the programme. For those who had graduated from Kahama, the satisfaction was as follows: 42.9%(n=12) of the students were dissatisfied, 39.3%(n=11) were satisfied with the programme , 14.3%(n=4) of the students were strongly satisfied and only 3.6%(n=1) was strongly dissatisfied).

Table 6 -1 : Satisfaction of CHW Students with the Content of the Program

#	Training Aspect			CHW STUDENTS(n=153)						
		SD	D	N	S	SS	Total	High %	Score	% Decision
		1	2	3	4	5				
1	Course content provided theory, principles and practical aspects that address key issues	0	1 (0.7)	0	54 (35.3)	98 (64.1)	153 (100)	64.1	3.3	Strongly Satisfied
2	Course content included and addressed critical issues faced in the service community	0	0	0	26 (17)	127 (83)	153 (100)	83	5	Strongly Satisfied
3	Course content demonstrated how the material presented can be practically applied	0	0	0	43 (28.1)	110 (71.9)	153 (100)	71.9	4.7	Strongly Satisfied
4	The curriculum for the course was provided	0	4 (2.6)	0	33 (21.6)	116 (75.8)	153 (100)	75.8	4.7	Strongly satisfied
5	Course materials enhanced the overall	0	0	0	70 (45.8)	83 (54.2)	153 (100)	54.2	4.5	Strongly satisfied

#	Training Aspect	CHW STUDENTS(n=153)								
		SD	D	N	S	SS	Total	High %	Score	% Decision
		1	2	3	4	5				
	effectiveness of the course									
6	Course content addressed the challenges and opportunities in the changing work environment	0	1 (0.7)	1 (0.7)	44 (28.2)	107 (69.9)	153 (100)	69.9	4.7	Strongly satisfied
7	Content focuses on relevant skills	0	6 (3.9)	0	49 (32)	98 (64.1)	153 (100)	64.1	4.6	Strongly satisfied
8	The course materials were provided as expected	9 (5.9)	24 (15.7)	0	65 (42.5)	55 (35.9)	153 (100)	42.5	3.9	Satisfied
	Total (A)	9	36	1	384	794	1224			
	Likert Computations (AxSV-Scale value)	9	72	3	1536	3970	5590			
	Weighted score						4.5			
	Over all Decision						5	66%		Strongly Satisfied

Key: SD- Strongly Dissatisfied; D-Dissatisfied, N- Neutral; S- Satisfied; SS-Strongly Satisfied; T-Total; Wt-Weighted score

Table 6-2: Satisfaction of Students with the Program-In school and out of school

Name of the school	Student status		Frequency/ Percent	My expectations for the course met				Total
				SD	D	S	SS	
Shirati	Status of students	In school	Count	0	0	15	6	21
			% within Status of students	.0%	.0%	71.4%	28.6%	100.0%
			% within My expectations for the course met	.0%	.0%	44.1%	18.8%	29.6%
			% of Total	.0%	.0%	21.1%	8.5%	29.6%
		Graduated	Count	1	4	19	26	50
			% within Status of students graduated	2.0%	8.0%	38.0%	52.0%	100.0%
			% within My expectations for the course met	100.0%	100.0%	55.9%	81.3%	70.4%
			% of Total	1.4%	5.6%	26.8%	36.6%	70.4%
	Total		Count	1	4	34	32	71
			% within Status of students	1.4%	5.6%	47.9%	45.1%	100.0%
			% within My expectations for the course met	100.0%	100.0%	100.0%	100.0%	100.0%
			% of Total	1.4%	5.6%	47.9%	45.1%	100.0%
Kahama	Status of students-In school or graduated	In school	Count	3	16	33	2	54
			% within Status of students	5.6%	29.6%	61.1%	3.7%	100.0%
			% within My expectations for the	75.0%	57.1%	75.0%	33.3%	65.9%

Name of the school	Student status		Frequency/ Percent	My expectations for the course met				Total
				SD	D	S	SS	
			course met					
			% of Total	3.7%	19.5%	40.2%	2.4%	65.9%
		Graduated	Count	1	12	11	4	28
			% within Status of students	3.6%	42.9%	39.3%	14.3%	100.0%
			% within My expectations for the course met	25.0 %	42.9%	25.0%	66.7%	34.1%
			% of Total	1.2%	14.6%	13.4%	4.9%	34.1%
	Total		Count	4	28	44	6	82
			% within Status of students	4.9%	34.1%	53.7%	7.3%	100.0%
			% within My expectations for the course met	100. 0%	100.0%	100.0 %	100.0%	100.0%
			% of Total	4.9%	34.1%	53.7%	7.3%	100.0%

4.4 Satisfaction of CHW Students with Instructors' Competence and Teaching Methodology

Table 7 below reports findings related to the question that wanted to investigate satisfaction of students with various areas such as course objectives, competence of tutors, whether tutors had enough time to get prepared for the course and the methodology of training. Using a five point Likert Scale, it was generally found out that most students were strongly satisfied (weighted score of 4.6) with the tutor's capacity and their teaching approaches. But, to be specific, about 72.% (weighted score=4.8) of students were strongly satisfied with the way tutors managed to state the course objectives well, 42.5% (weighted score=3.9) of the students were satisfied with the adequacy of the course objectives 72.5% (weighted score=4.7) of the students were strongly satisfied with the well preparedness of the tutors 85% (weighted score=4.9) of them had opinion that the tutors had the capacity to teach and 77% (weighted score= 4.8) of the students reported strongly that the tutors used participatory methods of teaching in the class and outside the class.

For those still in school and those who had graduated and using the cross tabulation, results in Table 8 show that – for those from Shirati, 66.7 %(n=14) of those still in college had an opinion that the tutors had the capacity to train them and 33.3 % (n=7) of them reported to be satisfied with the tutors' competence. For those who had graduated from the same institute, the results show that 84 %(n=42) of them were strongly satisfied with tutors' capacity while 16%(n=8) of them were satisfied with the programme. For Kahama, those who were still in school, 92.6% (n=50) were strongly satisfied with tutors' competence and 7.4 % (n=4) had an opinion that the tutors had capacity to train them. For the CHWs who had graduated from Kahama, the results show that 85.7 % (n=24) of them had the strong opinion that the tutors had the capacity to train while 14.3%(n=4) of them had the opinion that the tutors had the capacity to train their students.

Table 7: Satisfaction of Students with Mode of instructions and instructor competence

#	Training Aspect	STUDENTS(n=153)								
		SD	D	N	S	SS	T	High %	Wt Score	% Decision
		1	2	3	4	5				
1	Clearly stated Course objectives	0	3 (2)	0	39 (25.5)	111 (72.5)	153 (100)	72.5	4.8	Strongly Satisfied
2	Adequate Course objectives	9 (5.9)	24 (15.7)	0	65 (42.5)	55 (35.9)	135 (100)	42.5	3.9	Satisfied
3	Well prepared tutors	0	1 (0.7)	0	41 (26.8)	111 (72.5)	153 (100)	72.5	4.7	Strongly Satisfied
4	Instructors had adequate knowledge on the course	0	0	0	23 (15)	130 (85)	153 (100)	85	4.9	Strongly Satisfied
5	Instructor used participatory approaches	0	0	0	35 (22.9)	118 (77.1)	153 (100)	77.1	4.8	Strongly Satisfied
	Total	9	28	0	203	**525**	765			
	Likert Computations	9	56	0	812	**2625**	3502			
	Weighted score						4.6		4.6	Strongly satisfied
	Over all Decision						4.6	69%	4.6	Strongly Satisfied

Key: SD- Strongly Dissatisfied; D-Dissatisfied, N- Neutral; S- Satisfied; SS-Strongly Satisfied; T-Total; Wt-Weighted score

Table 8: Perception of CHW Students on Capacity of Teachers for in college and graduated Students

Name of the school	Student status		Frequency/ Percent	Instructor had adequate knowledge on the course		Total
				S	SS	
Shirati	Status of students	In school	Frequency	7	14	21
			% within Status of students	33.3%	66.7%	100.0%
			% within Instructor had adequate knowledge on the course	46.7%	25.0%	29.6%
			% of Total	9.9%	19.7%	29.6%
		Graduated	Count	8	42	50
			% within Status of students	16.0%	84.0%	100.0%
			% within Instructor had adequate knowledge on the course	53.3%	75.0%	70.4%
			% of Total	11.3%	59.2%	70.4%
	Total		Count	15	56	71
			% within Status of students	21.1%	78.9%	100.0%
			% within Instructor had adequate knowledge on the course	100.0%	100.0%	100.0%

Name of the school	Student status		Frequency/ Percent	Instructor had adequate knowledge on the course		Total
			% of Total	21.1%	78.9%	100.0%
Kahama	Status of students	In school	Count	4	50	54
			% within Status of students	7.4%	92.6%	100.0%
			% within Instructor had adequate knowledge on the course	50.0%	67.6%	65.9%
			% of Total	4.9%	61.0%	65.9%
		Graduated	Count	4	24	28
			% within Status of students	14.3%	85.7%	100.0%
			% within Instructor had adequate knowledge on the course	50.0%	32.4%	34.1%
			% of Total	4.9%	29.3%	34.1%
	Total		Count	8	74	82
			% within Status of students	9.8%	90.2%	100.0%
			% within Instructor had adequate knowledge on the course	100.0%	100.0%	100.0%
			% of Total	9.8%	90.2%	100.0%

4.5 Satisfaction of CHW- trainees with the Relevance of Training to the Job

Results in Table 9 show that 70% (weighted score=4.7) of students were strongly satisfied with the fact that the programme was relevant in the context of the Tanzanian labour market and the kind of job that they were expecting to serve in the future as Community Health workers. Specifically, about 52.3% (weighted score=4.5) of the students were satisfied in a way that the programme had imparted skills in them, 77.8% (weighted score=4.8) of them were strongly satisfied with materials provided, 74.5% (weighted score=4.8) of the students also pointed out that the practical aspect of the course provided had been relevant to the job and 73.9% (weighted score=4.7) of them reported strongly that the assessment made by tutors and the feedback provided was useful for increasing their skills to pursue the job in the future.

Table 9: Satisfaction of Students with the Relevance of the CH Program to the Job

#	Training Aspect	STUDENTS(n=153)								
		SD	D	N	S	SA	T	High%	Wt score	% Decision
		1	2	3	4	5				
1	Skills acquired	0	0	0	80 (52.3)	73 (47.7)	153 (100)	52.3	4.5	Strongly Satisfied
2	Course materials relevant	0	0	0	34 (22.2)	119 (77.8)	153 (100)	77.8	4.8	Strongly Satisfied
3	Practical aspect relevant to job	0	0	0	39 (25.5)	114 (74.5)	153 (100)	74.5	4.8	Strongly Satisfied
4	Informative Practical assessment	0	0	0	40 (26.1)	113 (73.9)	153 (100)	73.9	4.7	Strongly Satisfied
	Total	0	0	0	193	419	612			
	Likert Computation	0	0	0	772	2095	2867			
	Weighted score						4.7		4.7	Strongly Satisfied
	Over all Decision						4.7	70	4.7	Strongly Satisfied

Key: SD- Strongly Dissatisfied; D-Dissatisfied, N- Neutral; S- Satisfied; SS-Strongly Satisfied; T-Total; Wt-Weighted score

4.6 Satisfaction of CHW- students with Learning Environment and Technology use

Results in Table 10 show that most of the students were strongly satisfied (with weighted score of 4.5) with the fact that the learning environment for the course and use of technology was of high quality. For each specific aspect, the findings in the same Table show that 62.1% (weighted score=4.5) of the students were strongly satisfied with the training facilities that they were in place and helped them to learn, 51.6% (weighted score=4.4) of the students reported strongly that modern equipment were used in teaching, and training resources were available while 82%(weighted score=4.2) of the students reported that trainers were available to support the students whenever needed.

Table 10: Satisfaction of student with learning environment

#	Training Aspect	STUDENTS(n=153)								
		SD	D	N	S	SS	T	High%	Wt score	% Decision
		1	2	3	4	5				
1	Training facilities and equipment were in good condition	0	9 (5.9)	0	49 (32)	95 (62.1)	153 (100)	62.1	4.5	Strongly Satisfied
2	Course used up-to date equipment and facilities	0	7 (4.6)	0	66 (43.1)	79 (51.6)	153 (100)	51.6	4.4	Strongly Satisfied
3	Training resources were available when needed	1 (0.7)	9 (5.9)	0	63 (41.2)	79 (51.6)	153 (100)	51.6	4.4	Strongly Satisfied
4	Trainers were available for learners when needed.	0	0	0	28 (18.3)	125 (81.7)	153 (100)	81.7	4.2	Strongly Satisfied
	Total	1	25	0	206	378	612			
	Likert Computation	1	50	0	824	1890	2765	70		
	Weighted Score						4.4		4.4	
	Over all Decision						4.4	70	4.4	Strongly Satisfied

Key: SD- Strongly Dissatisfied; D-Dissatisfied, N- Neutral; S- Satisfied; SS-Strongly Satisfied; T-Total; Wt-Weighted score

4.7 Results on Focus Group Discussion with Tutors on Satisfaction with the CH Programme

Table 11 below reports the findings from the FGD carried out among tutors in Kahama and Shirati institutes. The details of each theme and sub themes are provided hereunder. There were three main themes that came out of the discussion, namely curriculum and content, teaching and learning materials, and quality of students and the relevance of the course to the students. Based on these themes, the sub themes were established, 1) Curriculum and content – the sub themes such as training process, adequacy of time for the programme**,** and nature of the curriculum 2) Teaching and Learning materials included availability of books, library, ICT facilities, students practical aspects of the course, capacity of tutors to teach new course, and student support from administrators 3) Quality of students and their perception on the programme - quality of students, the way students liked the programme, and students' performance. Out of the three themes, the discussion came up with a number of findings such as highlighted below:-

- Training process went well for the first batch although it was thought that since it was our first time to be in college, so we needed to read books, for the second batch we were now familiar with the college environment in general.

- The time is too short given the nature of the curriculum. The curriculum seems to be missing some relevant topics like on palliative, preventive and curative aspects, and rehabilitative health. The curriculum covers three areas the community health, social welfare and medical attendant, however they are over loaded and not focused.

- Career progression of this course is not clear, like progressing to diploma and degree level.*' there are some competences in the curriculum such as on preventive skills were not included and even their scope of work''(Tutor-Shirati,2017)*

- There are few books on CH since this is a new programme. So students are advised to use the internet.

- There is limited use of ICT facilities such as LCD and video conference in teaching and learning in both colleges. Students use their own smart phones to access learning materials, but there is no content developed for e/ m-learning. There are few ICT facilities here at Shirati , so we call partners to support us...(Tutor Shirati, 2017)

- Tutors are motivated to teach, however they are not familiar with the method to teach the new programme. Tutors support the students in classrooms and outside the class room.

- We are just teaching this course because of experience, but we have not yet received intensive teaching methodology on how to teach the new programme (Tutor- Shirati, 2017)

- Students do well in practical attachment but the costs are too high to the students and the time is limited since they just go only once.

- *''there is serious shortage of reference books for CHW students and tutors and the use of ICT is limited as well'' (Tutor-Kahama, 2017).*

4.8 Results on Focus Group Discussion with Tutors

Table 11: Perception of Tutors on the program

Sn	Theme	Sub Theme	Results
1	Views on the curriculum and content	training process**,** adequacy of time for the program**,** nature of the curriculum,	▪ Training process went well for the first batch, thought it was the first time, so needed to read books, for the second batch we are now familiar ▪ The time is too short given the nature of the curriculum. The curriculum seems to be missing some relevant topic like on palliative, preventive and curative aspects, and rehabilitative health. The curriculum covers three areas the community health, social welfare and medical attendant that seems to be over ambitious and not focused. ▪ Career progression of this course is not clear, like progressing to diploma and degree level. ▪ *''there are some competences in the curriculum such as on preventive skills were not included and even their scope of work''(Tutor-Shirati,2017)*

Sn	Theme	Sub Theme	Results
2	Opinion on the teaching and learning facilities	-Availability of books, library, ICT facilities, students practical , capacity to teach new course, student support from administrators	▪ There are few books on CH since this is a new program. So students are advised to use internet. ▪ There is limited use of ICT facilities such as LCD and video conference in teaching and learning in both schools. Students use their own smart phones to access learning materials, but no content developed for e/mlearning. *There are few ICT facilities here at Shirati , so we call partners to support us...(Tutor Shirati, 2017)* ▪ Tutors are motivated to teach and however are not familiar with the method to teach the new program. Tutors support the students in classrooms and outside the class room. ▪ *We are just teaching this course because of experience, but we have not yet received intensive teaching methodology on how to teach the new program(Tutor- Shirati, 2017)* ▪ Students do well in practical attachment but the costs are high to the students and the time is

Sn	Theme	Sub Theme	Results
			limited since they just go only once. ▪ *' there is serious shortage of reference books for CHW students and tutors and the use of ICT is limited as well''(Tutor-Kahama, 2017)*
3	Views on the Nature of students and Relevance of the programme	quality of students, the way students like the programme, students performance	▪ Majority of students are weak since the admission criteria are just a D in biology and any three Ds. Some students perform very well but majority are weak and they just perform on marginal passes. ▪ Students are motivated to pursue this programme, and work with communities to address health issues ▪ Students find the programme useful since it covers community health needs, however, lack of clear recruitment systems has demoralised them to pursue this programme. This year, the enrolment of students has gone down significantly.

CHAPTER FIVE

5.0 DISCUSSION OF FINDINGS

5.1 Overview

This chapter discusses the findings from the study that aimed at assessing the satisfaction of CHW students with the Community Health Course in Kahama and Shirati Health institutes. The chapter focuses on four areas namely the satisfaction of students with course content, teaching methodology and tutors' competence, relevance of the course to the job and learning environment. In the course of discussion, comparison with other studies across the world will be made as well.

5.2 Characteristics of the Respondents

Despite the fact that this study focused on the satisfaction of students pursuing Community Health Course, yet understanding their social and demographic characteristics has the actual focus.. Based on the students that the study managed to contact for the self-administered questionnaire and telephone interview, majority of them were from Kahama Health institute compared to Shirati Health Institute (HI). The only justification for the difference and response is based on the fact that Kahama HI is a government school and the school fees are more affordable compared to Shirati HI. This has attracted many students to join Kahama HI so it was an advantage to the study to have more respondents from Kahama based on the sample size calculation and adjustments made.

In terms of gender, majority of the students interviewed were males compared to females. This is contributed by the fact that in most of the secondary schools, performance of females in science subjects has been poor and the motivations for them to learn science subjects has not received attention. Age wise, the majority of the respondents were between 16-24 years old, and most of these were those who had just completed form four or completed form four in the past few years. In addition, majority of the respondents interviewed were those had completed school, with the reason that the first batch of the enrolment to CH course was

receiving many applicants. This was also due to the fact that, the course was new and there was a prospect for the recruitment into the public service. The study also learnt that the mode of training that was being commonly used in the two HIs was face to face, where students were staying in the school for two semesters. The only advantage of this mode is that students had enough time to concentrate on their studies; however, it was limited in terms of the capacity of the schools to accommodate many students and innovation diffusions.

System of paying school fee by students was also investigated in order to further establish the satisfaction as well as the motive behind joining the programme. In the two institutes from which data were collected, and the students that were sampled for data collection, no one had received sponsorship. However, discussion with the principal from Shirati HI revealed that there were some few students who were sponsored by some NGOs such as CHAI, JSI etc.

Regarding the sponsorship scheme for the students, all of the students who were interviewed, none of them had worked as a CHW before; this shows that there was no intensive sensitization so as to motivate CHWs who had been giving support as volunteers and those with required entry qualifications to apply for the course.

5.3 Satisfaction of CHW Students with the Content of the Programme

Since the inception and formalisation of the Community Health Programme and its associated one year training, there have been a number of initiatives undertaken to understand whether the programme is effective or not. Using the Kirk Patrick Model for level 1, with 5 points Likert scale, it is evident that most of the students who were doing the CH programme had a feel that the course content of the programme would meet their expectations. This implies that the course content was well prepared in such a way that the theories and principles that were presented demonstrated the critical issues occurring in the community. More specifically, the course content that was then in use was prepared in such a way that presented clearly the materials that could be applied. It was well prepared to enhance learning, and to support or address critical issues in the community; well-structured and so it added value in

terms of the needed skills. Evidence from FGD conducted among tutors still implied training process went well for the first batch, though it was the first time for the tutors to teach such a programme. The time for the programme was too short given the nature of the curriculum which unfortunately missed some relevant topics like palliative, preventive, curative, rehabilitative courses. The current curriculum covers three areas namely community health, social welfare and medical attendants that seem to be over ambitious and not focused. The career progression of this course is not clear, like progressing to diploma and degree level this has affected the enrolment of students for the second batch. One tutor was noted saying:

> *''There are some competences in the curriculum such as preventive skills which were not included as well as their scope of work' '(Tutor-Shirati,2017.*

By comparing those who were from Shirati, majority of them were satisfied with the programme in terms of the content, the way the curriculum was structured and the brief duration of the course. In the same analysis, graduates and those still in the college were both happy with the programme. For Kahama, half of the graduates were satisfied with the programme, though this number appeared to be almost the same to those who were not satisfied with the programme. This might have been contributed by the fact that there were challenges with the accommodation for the students compared to Shirati, and that was the time when the government ceased to provide meal in school, so students started to pay out of their pockets.

These findings relate to what was found in other countries like by Partners in Health (2001), Minnesota International Health Volunteers (2004) and Pathfinder International (2005, 2011) and Lim *et al.,* (2002) who reported the CHWs who had been trained using short term programme, had strong feel that the programme was useful and the training content and manual were prepared in such as a way that the knowledge and skills had been imparted to help them do better.

5.4 Satisfaction of Students with Instructors' Competence and Teaching Methodology

Students' competence and mastery of the subject matters depends on a number of factors. Most CHW students were happy with the capacity of the tutors and their teaching methodology. This implies that tutors from the two institutes showed good capacity in teaching the CHWs since they used different approaches in teaching such as group work, simulations, games, role model and guest speaker as well as practical sessions. This further contributed by the fact that most of the tutors were recruited with required qualifications Since NACTE has been providing cut off points for the qualifications required by the tutors. Despite the fact that the programme was just new, yet tutors were managing to motivate students to learn and understand. This has been possible due to the fact that, the tutors tend to explain clearly the course objective in the class, and confidence that tutors demonstrate in the course of delivery.

Despite the fact that most of the students were well satisfied with the way tutors were delivering. However, the findings from FGD conducted to tutors FGD revealed that some areas which tutors themselves thought needed improvements. Some of the tutors in the course of discussion mentioned that they had challenges in teaching the course since it was a new one and so sometimes they had to spend more time to read books. One tutor from Shirati HI noted that:-

> *'We are just teaching this course because of experience, but we have not yet received intensive teaching methodology on how to teach the new programme'' (Tutor- Shirati, 2017).*
>
> *''We are motivated to teach, however we are not familiar with the method to teach the new programme. Tutors support the students in classrooms and outside the class room (Tutor-Kahama, 2017)''.*

In addition, some of the tutors were not part of the curriculum development team and even the orientation of tutors on the curriculum has not taken place in some schools. The findings in this section are consistent with those made by Asnake and Tilahun (2010) who proposed the use of -didactic and interactive techniques in training of CHW in Ethiopia so as to increase not only CHW skills but also their motivation.

5.5 Satisfaction of CHW Students with the Relevance of the Training to the Job

Candidates of the CH course had their own motives to join the programme. This was a key to them as they joined the programme. The moment they started learning about the course, they also started relating and equating to their expectations about the labour market and job that they dreamed to do once they have completed classes. The findings of this study has confirmed that despite the fact that the CH course is just new, yet most of the students confirmed that whatever they learnt in the class would meet their expectations and so they were excited with the new programme. This further implies that the programme has imparted relevant skills that enabled them to do better with the job ahead of them. The curriculum was well designed in such a way that it helped them to do theories as well as practical in the community. They said that these practical aspects had helped them to gain more skills and be able to serve better the community once they graduated. The modality of giving the students relevant learning materials for reference had helped them to learn more. In addition, the system of attaching students to the community as field practicum and assessing their competence and giving them prompt feedback had been of added value to them in terms of gaining not only knowledge in the class but also skills for the job ahead of them.

In the same analysis, Tutors had the same opinion that students were highly motivated with the CH programme. In the same way, some tutors thought that students had been receiving adequate support from the administration that could add value to their skills and do better in the job ahead of them. There were however concerned about decline in number of applicants since they were not sure of the market of their programme. This was contributed to since the first batch of the CHW graduated. It was reported that there had been confusion in terms of the three roles that the graduates might assume such as CHW, medical attendant and para social worker. These findings relate with studies by Ford *et al.,* (1992) and Warr *et al.,* (1999) who suggested that characteristics of the trainee's personality directly affect the training process and training transfer. In the same note, motivation of the person to learn and transfer the skills to his work (Facteau *et al.,* 1995; Kontoghiorghes, 2002); his satisfaction of the opportunities to apply the new skills and his personal career goals (Kontoghiorghes, 2002); the satisfaction of the trainee regarding the management of his career goals through training (career utility), as well as the goals directly connected to his work (job utility) (Clark *et al.,* 1993); and organizational commitment (Facteau *et al.,* 1995; Kontoghiorghes, 2002) all of these may affect the prospective graduate in a given field.

5.6 Satisfaction of CHW students with Learning Environment and Technology

In most learning environment, students' competences have generally depended not on only the competence of tutors alone but also on the availability of conducive environment and use of modern training tools in both the classroom and practicum. The Community Health course training has been preparing students to work in the health system as Community Health Workers. Therefore such preparation has been prompting availability of good learning and teaching facilities. This study has learnt that in both schools, there has been availability of learning environment and use of technology in teaching. In the two schools visited, there were enough classrooms, presence of books on Community health and general courses, presence of a computer laboratory and skill laboratory. However, there were areas that had been cited by students that could not give them more satisfaction such as having little equipment in the skills laboratory, having few LCD for presentation and lack of some books on Community Health.

Findings from Focus Group discussion with tutors in the two institutes posit the same observation. Inadequacy of teaching and learning facilities were cited by one of the tutors from Shirati although it was seen to be more serious in government schools compared to FBOs. In addition, the use of technology in teaching is further limited by the financial capacity and orientation of tutors to use them, On this particular regard, one of the tutors from Kahama HI and Shirati respectively noted that:-

> "There *is serious shortage of reference books for CHW students and tutors and the use of ICT is limited as well'' (Tutor-Kahama, 2017),*
>
> *'There are few ICT facilities here at Shirati, so we call partners to support us... (Tutor Shirati, 2017)''*

CHAPTER SIX

6.0 CONCLUSION AND RECOMMENDATIONS

6.1 Overview

This chapter presents both conclusion and recommendations of the study that aimed to assess the satisfaction of CHWs students with the training programme.

6.2 Conclusion

6.2.1 Satisfaction of CHW students with the Content of the Program

There was a note echoing a feel of satisfaction from the CHW students and tutors on the best way the course would be designed. It was revealed that the programme course had captured relevant content in terms of presenting the required theories and principles. The programme was observed to have been prepared to enhance learning, and to address critical issues in the community. However, it was noted that there were areas in the curriculum that needed to be improved such as having lots of modules with limited time; some key modules were missing in the curriculum such as those related to topics such preventive, curative and palliative medicines/services, aspects, procedures.

6.2.2 Satisfaction of CHW Students with Instructors Competence and Teaching Methodology

It is concluded that most of the students were satisfied with the tutors, subject matter delivery style, and the general support provided. Tutors from the two schools were revealed to show capacity to deliver the subject matters. This was expressed through the way they were using different approaches in teaching such as group work, simulations, games, role model and guest speaker as well as they were handling the practical aspects of the course. However, since this was a new course, some tutors were not familiar with the way they had to teach CHW students something which posed some teaching problems.

6.2.3 Satisfaction of CHW Students with the Relevance of the Training to the Job

The study revealed that there was a strong satisfaction among CHW students due to the fact that the course in question was seen to be relevant to the job prospects ahead of them. The programme was imparted relevant skills to students that would enable them to do better for the job ahead of them. The curriculum was designed in such a way that it helped them to do theories as well as practical issues in the community. The feedback mechanism provided by the tutors on the practical attachment helped them to learn more and correct their mistakes. On the positive note, students were seen to be more motivated with the CH programme and even being part of health courses as a new programme. There were however concerns about decline in number of applicants since they were not sure of the market following the programme or study they had embarked upon. In addition, clarity on which posts they should assume after graduation remained a paradox since the curriculum mentioned only three posts namely CHW, Medical attendant and Para social worker which they were likely to fit in upon graduating.

6.2.4 Satisfaction of CHW students with learning environment and technology

It is concluded that CHW students are mostly satisfied with the learning environment. As a starting phase, the facilities in place can suffice to support learning and teaching. However, inadequacy of facilities in the skills lab, having few LCD for presentations and inadequate reference books and unreliable internet services and search engines for Community Health reference materials were posed as critical challenges There are limited use of innovation in teaching such as use of learning and eLearning so as to motivate students to learn more and at convenience time.

6.3 Recommendations

Based on the study findings, this study recommends the following:

6.3.1 Satisfaction of CHW Students with the Content of the programme

- The Ministry of Health, NACTE and any other responsible bodies should carry out curriculum review so as to address the existing gaps. This should go hand in hand with development of scheme of services, On job training package, Job description, CHW took kit, Scope of practice and Regulatory body of the CHW to speed up the recruitment of CHWs.

6.3.2 Satisfaction of CHW Students with Instructors Competence and Teaching Methodology

- Schools and Ministry of Health should carry out an orientation of all tutors on the Community Based Health Programme and on how to teach CH programme.

6.3.3 Satisfaction of CHW Students with the Relevance of the Training to the Job

- The Government and other stakeholders should support the recruitment of the CHW into the health system so as to encourage more students to join the programme
- The Government to clarify on what roles should the CH graduates pursue among the three stated in the curriculum -CHW, Medical attendant and Para social worker.

6.3.4 Satisfaction of CHW Students with Learning Environment and Technology

- The Government and other partners to support schools with the use of modern teaching technologies and facilities based on specific needs.

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APPENDICES

Appendix I: Questionnaire for the survey –Tool for Students

Instructions

The following questions are expected to provide information to the programme on the learners and implementers on the training experience. Please keep in mind your standards, hopes and concerns.

Consent form

Hello, my name is Pius Chaya from MUHAS, taking master degree in Public Health. I am collecting views regarding the satisfaction of CHW students on the training programme. I am happy to ask you to take part in this study that will contribute towards improving the CBHP in Tanzania. All the information will be used for the purpose of sharing of this study only and will be treated with high confidentiality

May I know whether you have a question? Do you agree to participate? May I begin the interview?

1. Yes [____] 2.No [____]

SIGNATURE …….. DATE…….

Information on Training Institution

#		Responses
1	Type of training institution i. Government ii. Private iii. NGO iv. Other (Specify)	
2	Name of school	
3	Duration of training programme in months	

#		**Responses**
4	Mode of training/Learning used-Multiple response i. Face to face-classroom ii. eLearning iii. mLearning iv. Video conferencing v. Mix Media (specify)_____	

Information on Trainees

#		**Respondent to Tick**
1	Gender of respondent i. Male ii. Female	
2	Worked as CHW i. Yes ii. No	
3	Years of previous professional experience i. Number of years_____ ii. NA_____	
4	Are you sponsored 1)Yes 2) No	
5	Status of respondent 1. On-going/In school 2. Graduated	
6	Age of trainee (next birth day) _____	

Assessment Main Components of Training

This section provides the evaluation information on the content, process, quality, instructors and relevance to the course. Using the Likert scale of 1 to 5 (**1- Strongly Dissatisfied , 2-Dissatisfied, 3-Neutral, 4- Satisfied and 5-Strongly Satisfied)**, please rate the degree to which you dissatisfied /satisfied with the following statements regarding various components of the training:

Information about Content

#	Training Aspect	SD	D	N	S	SS
		1	2	3	4	5
1	Course content provided theory, principles and framework that address key issues in course					
2	Course content included and addressed critical issues faced in the service community					
3	Course content demonstrated how the material presented can be practically applied					
4	Course content adequately covered the curriculum					
5	Course materials enhanced the overall effectiveness of the course					
6	Course content addressed the challenges and opportunities in the changing work environment					
7	Content focused on relevant skills					

Instruction and Instructor

#	Training Aspect	SD	D	N	S	SS
		1	2	3	4	5
1	Course objectives were clearly stated					
2	Course objectives were adequately met					
3	Instructors were adequately prepared to train					
4	Instructors had adequate knowledge on the course					
5	Instructor involved participants in class discussion and drew on their abilities and experiences.					
6	The course materials were provided as expected					
7	The course materials were relevant and organised					

Relevance to the Job

#	Training Aspect	SD	D	N	S	SS
		1	2	3	4	5
1	I have acquired relevant skills, competencies and abilities from the course					
2	The skills, competencies and abilities are applicable for my profession and or work place.					
3	The course material was up to date on current concerns to my job					
4	The practical sessions enhanced my skills to do my job					
5	The practical assessment simulated real life working situations					

Quality of Training

#	Training Aspect	SD	D	N	S	SS
		1	2	3	4	5
1	My expectations for the course were met					
2	Instructors' expectations of learners were clear					
3	The assessment methods used for appropriate					
4	Assessment modes were a fair test of my skills and knowledge					
5	Learners received useful feedback from the assessment					
6	Trainees received adequate support from instructors during training					
7	Instructors mentored trainees during the course					
8	The facilities and equipment were appropriate and enhanced my abilities					

Training Process

#	Training Aspect	SD	D	N	S	SS
		1	2	3	4	5
1	Training facilities and equipments were in good condition					
2	Course used up-to date equipment and equipments and facilities					
3	Training resources were available when needed					
4	Trainers provided required support to learners during the course					
5	Trainers were available for learners when needed.					

Appendix II: Focus Group Discussion Guide for the Tutors

1. What is your opinion on the training process?
2. Is the curriculum well updated?
3. What is your opinion on learning and teaching facilities?
4. Is the time adequate to cover the programme?
5. What are your views about the quality of our students?
6. Are your students fond of the programme?
7. Do you think this programme adds value to our students?
8. Are the students performing well in the class?
9. Do the students do practical?
10. Are the students motivated to do practical aspect of the course? Do they learn from such aspect?
11. Do students get adequate support from the administrators? Which specific support do students look for?

Appendix III: Ethical Clearance Form

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Ref. No.MU/PGS/SAEC/Vol. IX/27

15th March, 2017

Mr. Stephen Chaya
MPH
MUHAS.

RE: APPROVAL OF ETHICAL CLEARANCE FOR A STUDY TITLED "PERCEPTIONS OF COMMUNITY HEALTH WORKER-TRAINEES IN KAHAMA AND SHIRATI HEALTH INSTITUTES ON THE TRAINING PROGRAM"

Reference is made to the above heading.

I am pleased to inform you that, the Chairman has, on behalf of the Senate, approved ethical clearance for the above-mentioned study. Hence you may proceed with the planned study.

The ethical clearance is valid for one year only, from 16th March, 2017 to 15th March 2017. In case you do not complete data analysis and dissertation report writing by 15th March, 2017, you will have to apply for renewal of ethical clearance prior to the expiry date.

Prof. Andrea B. Pembe
DIRECTOR, POSTGRADUATE STUDIES

cc: Director of Research and Publication
cc: Dean, School of Public Health and Social Sciences