An Analysis of the Implementation Process of the Community-based Therapeutic Care Programme in Lusaka District

By

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Dedication

This thesis is dedicated to my parents Dr Boniface Zulu and Mrs Mary Zulu for the financial and emotional support they rendered to me throughout my study.

It is also dedicated to my supervisor Wanga Weluzani Chakanika for seeing the potential in me when the thesis writing seemed to be challenging.

Lastly, it is dedicated to my brothers Chisomo Zulu, Watson Banda and Alepha Zulu as well as my sisters Naomi Zulu and Dorothy Zulu-Zimba for strengthening me at my lowest points while writing this dissertation.

Thanks be to God.

Copyright Declaration

Authors Declaration

I declare that the dissertation herewith submitted for the degree in Masters of Education in Adult Education at the University of Zambia has not previously been submitted by me for a degree at any other University or institution of higher education.

Signature of the Author

Signed……..Date……..

Signature of the Supervisor

Signed…….Date……

Approval

This dissertation by Nyondwa Zulu is approved as fulfilling part of the requirements for the award of degree of Master of Education in Adult Education.

Examiner's Signatures

Signed…….Date……

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Signed……..Date…….

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Abstract

This study was undertaken in order to analyses the implementation process of the Community-based Therapeutic Care Programme at Chaisa, Mandevu and Garden Health Centres.

A descriptive survey design was used in the study because it involved asking the respondents for information using a questionnaire and focus group discussion. Both quantitative and qualitative approaches were used to collect data. A sample of a 135 people were selected which consisted of 3 nutritionists from Lusaka District Health Management Team (LDHMT), 26 health workers and 109 care givers. Purposive sampling was used in selecting care givers. Qualitative data was transcribed and coded based on themes that emerged. On the other hand quantitative data was analysed manually and presented using graphs with the aid of Excel

The findings revealed that the CTC programme was formulated after the escalating number of malnutrition cases amongst children below the age of five at the University Teaching Hospital. The formulation process of this programme was unique compared to countries like Niger, Ethiopia and Malawi which formulated the programme after an occurrence of natural and manmade disasters such as floods, famine and war. The formulation process in Zambia involved Valid International, Ministry of Health, National Food and Nutrition Commission. The CTC programme was being implemented by trained health workers and was monitored by sisters in charge, Elizabeth Glaser Pediatric ADIS Foundation and LDHMT. The implementation of the programme was no longer according to the original and intended plan due to lack of nutritionist and the integration of the Infant and Young Child Feeding Counseling. The Implementation process had various constraints ranging from inadequate health personal to implement the CTC programme to mothers not attending the CTC programme to mothers not attending the CTC programme. Solutions to the constraints were suggested which included, increasing the number of people trained to implement the CTC programme and sensitizing mothers on children's health

It was concluded that the Community-based Therapeutic Care Programme was not being implemented according to the original and intended plan. This was due to inadequate health workers which had a negative impact on the delivery of the programme. On the other hand, the inclusion of the Infant and Young Child Feeding Counseling positively influenced the implementation process despite it not having been part of the original plan

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List of Abbreviation

CTC	Community-based Therapeutic Care
CMAM	Community Management of Acute Malnutrition
EGPAF	Elizabeth Glaser Pediatric AIDS Foundation
IMAM	Integrated Management of Acute Malnutrition
IYCF	Infant and Young Child Feeding
LDHMT	Lusaka District Health Management Team
MOH	Ministry of Health
MCDMCH	Ministry of Community Development Mother and Child Health
RUTF	Ready to Use Therapeutic Food

CHAPTER ONE: INTRODUCTION

1.0. Overview

This chapter provides the background of the study. It starts with background information on Community-based Therapeutic Care (CTC) Programmes for Children between the ages of 0 to 5. It further highlights the statement of the problem, purpose of the study, research objectives, research questions, significance of the study, delimitation of the study, limitations of the study, operational definitions of terms and organization of the study. Finally, this chapter is summarised.

1.1. Background

The background of the study outlines the study…provides an overview of the rationale for the choice of the topic and line of inquiry in the dissertation. The primary purpose of the section is to establish the context for the problem that the researcher plans to investigate (Calabrese, 2009: 16). In a similar vein, Delicath and Buckley (2013:165) postulate that *…the background section should focus on the background of the problem…The discussion should describe the importance of the issues under study and should convince the reader that the proposed research is of value.* Thus the study was motivated by the background which is discussed below.

Malnutrition still remains a serious public health problem among young children in Developing Countries in general and Sub Saharan Countries in particular. Globally, it is considered as a "silent emergency" which has been killing millions every year (UNICEF 1998, as cited in Bwalya, 2013). Malnutrition, coupled with hunger, kills nearly six million children yearly, and the number of people that are malnourished currently in Sub-Saharan Africa is more than it was in the 1990s. It is also the home of the 11 million children that die before the age of five (FAO, 2005).

Narrowing it down to the Zambian context, malnutrition has been a challenge for many decades among Children and also Adults. Literature on malnutrition in Zambia indicates that *malnutrition rates are persistently high and on the increase...The proportion of stunted children rose from 50 percent in 1996 to 53 percent in 1998….The infant mortality (i.e.109 per 1000) and under five mortality rates are very high* (Human Development Report 2000: xiv-xv, cited in Chilele, 2004).

In the past two decades, Zambia still remains among the many countries in the Sub-Saharan Africa where the levels of malnutrition among child below the age of five are still very high and underlay 52% of the deaths of children in this age group (Bwalya, 2013:1).

Basing on the above trend, various efforts by the Zambian government and stakeholders have been put in place to reduce the levels of malnutrition among under 5 children in Zambia. According to National Food and Nutrition Commission (2008) cited in Bwalya (2013:2), such efforts include

> *…the launch of the National Food and Nutrition Policy and its implementation strategy in 1998, micronutrient and Vitamin A deficiency supplementation during child health week campaigns for children below the age of five, iron folate supplementation of pregnant women and post-partum vitamin A supplementation within two months after birth of last child. In addition, Information Education and Communication (IEC) campaigns have been embarked upon by the Ministry of Health and other stakeholders to try and educate the mothers on health and eating habits during antenatal clinics. Another strategy … has been the promotion of consumption of locally produced foods (Positive Deviance Heath). The aim of … programmes … is to ensure the reduction of malnutrition among under-5 children in Zambia through improved maternal characteristics. It's believed that through these programmes …, the problem of under-5 malnutrition can be prevented and reduced in few years to come.*

Additionally, in the year 2005, the Government of the Republic of Zambia, through the Ministry of Health, introduced a programme called Community-based Therapeutic Care (CTC) in selected Health Centers in Lusaka District. This was done to reduce the mortality rates among the children aged below 5 (Hamulebe, 2010).By September 2007, 2424 children were admitted to the programme (Valid International Zambia, 2007). This programme is now under the custodian of the Ministry of Community Development Mother and Child Health (MCDMCH). The aim of Community-based Therapeutic Care (CTC) programme was to treat children from home so that the caregivers do not stay hospitalised for a very long time. The advantage of this programme is

that malnutrition among children in the community is detected early and the programme is easily accessible.

It is envisaged that if this programme is well implemented, it has the ability to reduce the mortality rate to 41% (Hamulebe, 2010). As of 2007, 45% of the children below the age of five were stunted in growth (DHS 2007, cited in UNICEF 2013: 102). Statistics like this therefore make one wonder whether or not the CTC programme is serving its intended purpose. Thus, this study focused on the implementation process of the Community-based Therapeutic Care programme which was introduced with not only the aim of combating malnutrition levels among children below the age of five but also the mortalities that have resulted from malnutrition among these children. It is also worth noting that the CTC programme also provides health education to the Care givers on how they can care for their children. This study focused on the implementation process due to the fact that the Community-based Therapeutic Care programme is a programme that is meant for caregivers who are considered as adults. From an Adult Education perspective, for a programme to be successful they are certain aspects of programme planning that need to be incorporated in a programme if it is to reach its intended goals. Hence this study focused on the aspect of implementation seeing that the frantic efforts by the government in reducing the rates of malnutrition and the mortality rates seem not to be yielding the intend results.

1.2. Statement of the Problem

A specific research problem is a statement that identifies the phenomenon to be explored and why it needs to be examined or why it is a problem or issue (Koh and Owen, 2000: 33). In addition Delicath and Buckley (2013: 165) pronounce that … *the problem statement should be very clear and concise, and include published support for conducting the proposed study*. Thus the research problem for this study was as follows:

Malnutrition in Zambia has been a challenge for many decades among Children. As a way of curbing the nutrition problems faced by children aged between 0 and 5 the government of Zambia through the Ministry of Health introduced the Community-based Therapeutic Healthcare Programme which is currently being implemented by various health centers in Lusaka District (Hamulebe, 2010). Since the inception of Community-based Therapeutic Care in 2005, it has not

yet been established as to whether or not the programme is running according to the original and intended plan. Although various studies such as those conducted by Bachmann (2009), Hamulembe (2010) and Tekeste (2012) provided fundamental literature on the Community-based Therapeutic Care Programme, none of these studies has addressed the issue of the implementation process of the CTC programme. An assessment of the implementation process of a programme gives an allowance to understand whether or not the goals are being met, and how well the programme is functioning (Werner, 2004). This therefore justifies why the study was undertaken.

1.3. Purpose of the Study

The purpose of the study is succinct restatement of the problem. The purpose of the study offers a precise summation of the study (Calabrese, 2006, cited in Calabrese 2009: 123). Therefore, the purpose of this study was to analyse the implementation process of the Community-based Therapeutic Care Programme for children between the ages of 0 to 5 in Lusaka District

1.4. Specific Objectives

A research objective is defined as a *statement of purpose for which the investigation is conducted* (Ardales, 1992, cited in Calmorin and Calmorin 2007: 30). Consequently *objectives must be capable of having an outcome and the success of the dissertation will be measured against them*…. (Farrell 2011: 48).

Consequently, this study had the following as its objectives:

i. to establish how the Community-based Therapeutic Care Programme was formulated;
ii. to establish how the Community-based Therapeutic Care programme was being implemented;
iii. to determine the constraints that were encountered during the implementation process of Community-based Therapeutic Care Programme; and
iv. to establish respondents recommended solutions to the constraints that were encountered during the implementation process of the Community-based Therapeutic Care Programme.

1.5. Research Questions

Cottrell and Mckenzie (2011: 82) define research questions as *interrogative sentences that clearly and succinctly state the major question or questions to be answered in the study.* In addition, Foss and Waters (2007: 26) view research questions as*…what you try to find out by doing your study. It guides your research process, tells you what to look at and what to ignore, and is captured in the title of your dissertation*. Therefore, this research sought to answer the following questions:

i. how was the Community-based Therapeutic Care Programme formulated?

ii. How was the Community-based Therapeutic Care programme implemented?

iii. What constraints where encountered during the implementation process of Community-based Therapeutic Care Programmes? And

iv. what were the respondents recommended solutions to the constraints that were encountered during the implementation process of the Community-based Therapeutic Care Programme?

1.6. Significance of the Study

The significance of the study describes how the study contributes to existing research, benefits participants, contributes to practice and generates new theory (Calabrese, 2009: 148). For this particular study, no studies had been found that gave a description of how the Community-based Therapeutic Care programme was being implemented. However, by gaining an understanding of the implementation process of the CTC programme, planners in the Ministry of Community Development Mother and Child Health and various stakeholders may gain insight as to how best the programme can be implemented. Furthermore, Adult Educators would also gain insight on how to design, and evaluate Community-based educational health programmes that will be able to reach the intended target group, be adoptable in any given environment and be effective.

1.7. Delimitations of the Study

Delimitation is the scope of the study that is chosen by the researcher (Heppner and Heppner, 2004). Koh and Owen (2000: 38) refer to delimitation of the study as a *…boundary to which the*

study was knowingly confined. Delimitations are therefore important as they are used to *limit and clarify the scope to the study* (Cottrell and Mckenzie, 2011: 86). Therefore, the delimitation for this study was confinement to Chaisa, Mandevu and Garden Health Centers in Lusaka District that have the Community-based Therapeutic Care Programme.

1.8. Limitations of the Study

Having a research without limitations is impracticable. Limitations are the challenges a researcher anticipates to face or faces during the study. The researcher should therefore state the ways in which the challenges faced are to be overcome (Kombo and Tomp, 2006). In addition, Koh and Owen (2000:38) posit that limitations have the potential to limit the validity of the results. *By identifying the limitations of the study, the researcher is essentially informing the reader that these problems have already been considered but were not thought of such importance to prohibit conducting the study.* For this research, the major limitation was that it was an analysis of the implementation process of the Community-based Therapeutic Care Programme in three health Centers in Lusaka District, therefore the results from this study would have to be generalized with caution. Another limitation was that most of the participants in this programme did not have the ability to read and write in English. As a result of this, the researcher had to verbally translate the questionnaires into local dialect in order to capture the required data.

1.9 Operational Definition of Terms

Cottrel and Mckenzie (2011: 90) argue that *…terms that have special meanings or are unique to the study* are called operational definitions. Such terms provide definitions which are based on observable characteristics and how they will be used in a particular study (Calmorin and Calmorin, 2007). In this view the following terms have been defined according to the context of the study.

Community: A group of people sharing the same culture and living together in the same geographical area.

Implementation: It is a process of a series of decisions and actions directed towards putting a prior authoritative decision into effect.

Formulation: Planning or designing of a programme.

Community-based Therapeutic Care: It is an innovative concept that mobilizes communities and supports local health services to rapidly and effectively treat those with acute malnutrition. Usually highly afflicted individuals are treated at home rather than the health centers.

Care givers: These are guardians to children between the ages of 0 to 5 that suffer from malnutrition and are part of the Community-based Therapeutic Care Programme.

Emergency: Is a man made or natural disaster such as floods, famine and war.

1.10 Organisation of dissertation

Chapter one provides the background of the Community-based Therapeutic Care programme, it gives a statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, delimitation and limitations of the study, operational definitions, organisation of the dissertation and lastly summary of the chapter.

Subsequently, Chapter two provides a review of literature that is not only relevant to the study but also provides in depth knowledge of the topic under study. Furthermore, chapter three provides an elaboration of the methodology used in data collection and analysis of research findings. It further outlines the research design, target population, sample and sampling procedure and research instruments to be used in order to capture the necessary data. Thereafter, chapter four provides research findings which emanate from the research question. Chapter five presents the discussion of research findings which make certain the extent to which the research objectives have been met. Lastly, Chapter six provides a conclusion of the study that has been undertaken after which recommendations to various stakeholders in the CTC programme are made based on the major findings of the study.

1.11 Summary of Chapter

This chapter focused on the background information of the Community-based Therapeutic Care Programme. It further highlighted the statement of the problem, purpose of the study, the research objectives, research questions, significance of the study delimitations and limitations were also looked at. Operational definitions have also been given to give a common

understanding of the terms that were used in the study. Lastly, this chapter showed how this dissertation will be organized.

The proceeding chapter will review literature that is related to the Community-based Therapeutic Care programme and aspects of programme planning.

CHAPTER TWO: THEORETICAL FRAMEWORK AND LITERATURE REVIEW

2.1 Overview

The preceding chapter provided the background of study. It started with background information on Community-based Therapeutic Care (CTC) Programmes for Children between the ages of 0 to 5. It further highlighted the statement of the problem, research objectives, research questions, significance of the study, delimitation of the study, limitations of the study and operational definitions of terms in order to enhance understanding of the context of the study. The proceeding chapter will start by providing the theoretical framework that guided this study. Secondly, literature related to the topic under study will be reviewed bearing in mind that the hub of this study is an analysis of the implementation process of the Community-based Therapeutic Care (CTC) in Lusaka District. The literature review will unfurl as follows, a discussion on what malnutrition is as well as its causes seeing that the CTC programme is anchored on treatment of malnutrition, a historical overview of Community-based Therapeutic Care will be discussed in order to give an understanding of the genesis of the programme. Various studies related to the current study will be discussed so as to provide the reader with the various gaps in the studies. Lastly a summary of chapter 2 will be given.

2.2 Theoretical Framework

The theoretical framework that guided this research is the RE-AIM framework. This framework was originally developed to report findings from research (Glasgow, Vogt, & Boles, 1999), and was later on used in the health setting to review and organise literature on health promotions and prevention of diseases (Glasgow, Klesges, Dzewaltowski, Bull, &Estabrooks, 2004). RE-AIM is now being used by programme planners to improve the chances of the programme working in the "real world" (Green & Glasgow, 2006).

The RE-AIM framework comprises of five elements namely Reach, Effectiveness, Adoption, Implementation and Maintenance. The elements in this framework can be applied at participant and organisational levels in the programme design, in that they act as a guide in the improvement as well as adoption of evidence based health promotion programme. Belza et al (2007: 4) describes the elements found in the RE-AIM framework as follows;

“Reach” is the extent to which the targeted audience is drawn to the programme. The intended audience can be attracted to a programme based on factors such as cost, access, benefits familiarity, and programme supports. The Reach element in this framework addresses questions such as: “Will those who can benefit the most participate?” and “Will those having lower incomes be likely to participate?”

“Effectiveness,” refers to as programme outcomes. These are assessed by measuring the impact of the intervention on the quality of life. Consequences that may arise as a result of the programme are captured. The “Effectiveness” element furthermore emphasises on the value of the involvement of the stakeholders in programme planning phase so that support is generated and consensus is built on what measures will be used, the procedures to be followed as well as sharing control over the implementation as this helps in the reduction of barriers (Feifer, Fifield, Ornstein et al, 2004). In addition, Lövgren et al. (2001) perceive the dimension effectiveness in the RE-AIM framework as not only used to assess the positive effects on an intervention but also to evaluate the unexpected negative effects.

“Adoption” is similar to “Reach” but differs in the sense that it is assessed at the level of settings (community-based organisation, clinic or worksites) in the programme. It addresses the issues of whether or not a programme can be adopted in a particular setting, especially those that have limited resources. Adoption also demands that a programme must be representative in any given environment. The representative aspect of adoption is related to the replicability of an intervention (Glasgow, Magid and Beck et al, 2005).

“Implementation” is sometimes referred to as intervention fidelity. It addresses the extent to which programme developers deliver a programme as intended. Therefore Planas (2008) posits that it is imperative to assess the adherence and delivery component of a programme. The local modifications that are made to an intervention can greatly affect the outcomes. The consistency in the delivery of an intervention by different staff, and the extent to which modifications are made to a programme and its adaptability are also tackled under the implementation element.In order to assess fidelity in the implementation both quantitative and qualitative approaches are used (Besculides, Zaveri, Farris, & Will, 2006).

“Maintenance” applies to the individual participant and organisation level. Planas (2008) states that they are several factors that can influence the maintenance of a programme. At individual level, long term effects of the intervention on the quality of life and targeted outcomes are looked

at. The organisation level looks at the extent to which the programme is modified, sustained or discontinued over a period of time. Planas (2008) suggests that it is important to use existing personnel if a programme is to remain on course.

The main aim of the RE-AIM framework is to help funders, policy makers and evaluators to pay particular attention to details of the elements in a programme to bring about sustainable adoption and effective implementation of evidence based health promotion programme.

2.3 Literature Review

A literature review is an evaluative report of studies found in the literature related to your selected area. A literature review is an important activity to undertake in research in that it justifies the study, it avoids the replication of studies, illustrates how the subject has been studied previously, it highlights previous flaws in research and outlines the various gaps that exist in research (Boote and Beile, 2005).

2.3.1 Malnutrition

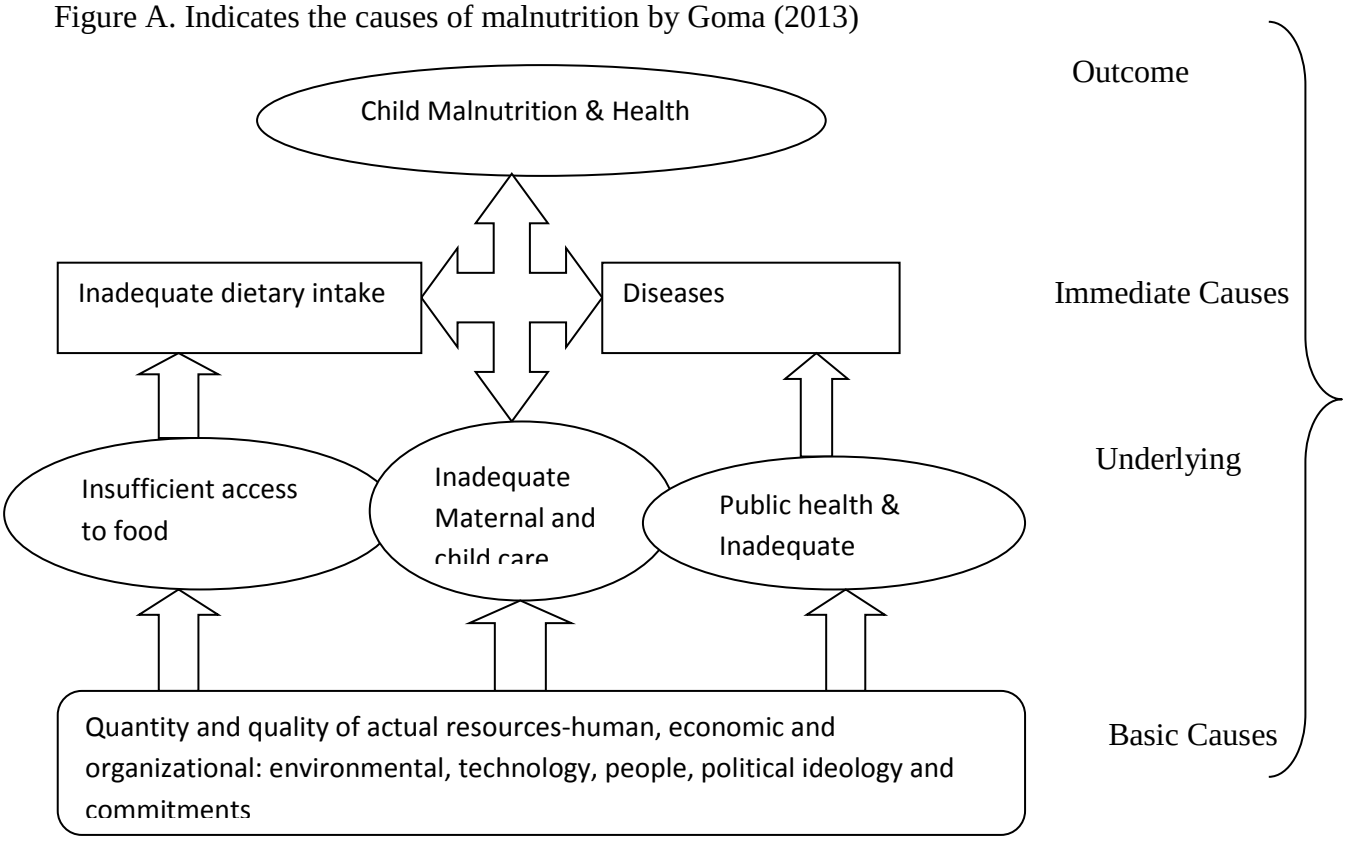
A third of the children below the age of five suffer from malnutrition in Africa which has an impact on their cognitive abilities as well as their physical state. 55 percent of the deaths of children under the age of five at global level are due to malnutrition (Pelletier et al, 1994) and in Africa 28 percent of the deaths are as a result of malnutrition; annually 2.9 million deaths are recorded (Ezzati et al., 2003). The insufficient intake of nutrients like fat, protein, vitamins and minerals results in child malnutrition. It can therefore be deduced that malnutrition is under nutrition which can be an upshot of biological and social economic nature. Insufficient quantities of absorbed foods as well as poor quality of the nutrients consumed are the direct determinants of malnutrition. All in all the nutritional status has an impact on children's health and children who also suffer from various diseases can be affected by malnutrition (WHO, 1995).

The nutritional status in simple terms is a mirror of the living conditions of a child as well as the social economic opportunities of his/her caretakers. Some of the underlying factors of the nutritional status have been noted as inaccessibility of good quality food, poor sanitation and clean water, poor health services and the absences of child immunization programmes, low

levels of education, gender discrimination, lack of knowledge on breastfeeding practices and many more.

Braveman and Egerter (2008:23) emphasis that, *Behaviors, as well as receipt of medical care, are shaped by living and working conditions, which in turn are shaped by economic and social opportunities and resources*.

Figure A. Indicates the causes of malnutrition by Goma (2013)



In order to make an assessment of a child's nutritional status the following characteristic are looked at: individual data on age, weight-for height, height-for-age, weight-for-age (WHO, 2007).

Malnutrition if caught in its early stages is simpler to treat in that all that is required is a balanced diet which contains sufficient and quantity proteins, carbohydrates, fats and micronutrients. This composition is easy to administer (Valid, 2006).

2.3.2 Historical Background Of The CTC Programme

Community-based Therapeutic Care (CTC) programmes can be traced back to the early 1990's when there were elevated numbers of both natural and man-made disasters like refuges and people being internally displaced by an assortment of incidences. This displacement of people and the increase in refugees had an impact on the nutritional status which greatly affected the infants, children, adolescents and pregnant women. This therefore led to the establishment of Therapeutic Feeding Centre's (WHO/UNHCR/IFRC/WFP, 2000). This feeding programme faced challenges like accessibility and limited coverage, cross infection and security risks and lastly it was costly because mothers would stay in the centers for a long period, thereby disrupting their daily activities (Valid, 2006). In order to address these challenges, the Community-based Therapeutic Care was introduced. Ethiopia in 2000 had a famine and so the first pilot for the CTC was implemented there (Collins and Sadler, 2002). This programme had a positive impact, meaning that the clinical effectiveness of the outpatient therapeutic care approach could be equated to or even better than the achievements that were attained at the Therapeutic Feeding Centers (TFCs) for cases that were not complicated. After having implemented the programme for years, Valid International developed a guide to aid health and nutrition managers to design, implement and evaluate CTC programmes (Valid, 2006).

2.3.3 Community-based Therapeutic Care Programmes (CTC)

The Community-based Therapeutic Care (CTC) Programme was designed as a way of responding to acute malnutrition in the public. The aim was to treat severe acute malnutrition and integrate this treatment with other interventions that were designed to reduce the number of acute malnutrition cases and improve the health of the public as well as food security (Collins, 2001). The programme was designed in such a way that it attempted to take into account the socio-economic factors in particular poverty, the workloads that the women have to attend to and also the factors that contribute to the late presentation of acute malnutrition and other conditions to health centers (Victoria et al, 2003). The design of this programme was aimed at reducing the cost and also increasing the accessibility for families or individuals that needed to seek medical attention (Collins et al, 2006). The foundation of understanding for the CTC programme is that quick access to nutritional care and consistency in the nutritional programme can lead to success rates and the impact can be high. In an event that a child does not access nutritional care and they

isn't consistency in attending the programme, the impact will be minimal (Valid, 2006). The deep seated principle of this programme is that appropriate care and assistance should be given to people whose lives are at risk from malnutrition (IFRC, 1994). The CTC programme is divided into four components which enhance its effectiveness in the treatment of Children suffering from server malnutrition. These components are Community Mobilization, Supplementary Feeding Programme (SFP), Out Patient Therapeutic programme (OPT) and Stabilization Centers (SC).

The community mobilization brings about awareness of the programme among the locals; there is also an increase in demand for the service and also participation in the programme which may result in a wide coverage. Admission into these various components is dependent on the condition of the client. They can be admitted to SFP or OTP and in an event that the clients develop complications; they can be referred to SC. The benefit with CTC is that it has the ability to reach communities that are far and the nation at large (Hambule, 2010). Collins (2004) stipulates that the CTC programme emphasizes the use of existing buildings as well as improving them so as to equip communities to tackle their situations. The advantage with this programme is that malnutrition can be detected in time thereby reducing the risk of complication. Those with medical complications can be treated with Ready To Use Foods (RUTF) or other foods that are easily accessible from home and are nutritious. It also has easily accessible services and can be integrated into other programmes in the line of nutrition, health and food security. Collins further says that CTC is a lifesaving programme that should be supported

2.3.4 Studies Linked to Community-based Therapeutic Care (CTC) Programmes.

A number of studies have been undertaken on Community-based Therapeutic Care (CTC) programme. They have been some similarities in some instances with the research designs though the study areas and sample sizes were different.

Habulembe (2010) conducted a study on performance evaluation of eleven severe acute malnutrition Community-based Outpatient Therapeutic care centers in Lusaka District of Zambia. This study was conducted in 11 health centers in Lusaka District. The target groups were restricted to children who had been part of the CTC programme and had been discharged from the Out Patient Community Therapeutic programme from September 2005 to September

2007 and the health care staff working in the programme. The study adopted the cross sectional design. The researcher triangulated the data collection instruments.

This study differs from Habulembe's study in that it was restricted to three health centres within Lusaka District. This study also targeted the children who are currently in the Community-based Therapeutic Care programme and their parents. This study adopted a descriptive survey research design and not a cross-sectional design.

Goma (2013), undertook a study in Lusaka District which aimed at determining the prevalence of malnutrition for children aged two years and below in two urban zonal child health centers. The study aimed at determining the point prevalence of malnutrition for children aged two years and below in two urban zonal child health centres in Lusaka. The research design used was a cross sectional quantitative design. A sample of 366 children aged two years and below that attended the clinic were drawn. Data was collected using checklist and documentary reviews.

However, this study was not a replica of Goma's study in that its purpose was to analyse the implementation process of Community-based Therapeutic Care Programmes for children between the ages of 0 to 5 in Lusaka District. The sample size was 150 and the research design was a descriptive survey. A focus group discussion, document review and semi structured questionnaire were used to collect data.

Chilele (2004), undertook a study at maternal and child clinic at Chinama Hills Hospital in Lusaka. The aim of this study was to look at the communication strategies that were being used in combating and preventing malnutrition. It focused on the perceptions of the mothers who attended the Maternal Health Clinic at Chinama Hills Hospital regarding the nutrition education that is conducted by the clinic. It also looked at whether or not the information that was provided at the clinic was utilized by the mothers and also the role of the health nutrition officers in the designing of the messages. The research design that was used was an attachment design.

The study conducted by Chilele (2004) differed from the current study in that its main focus was on the implementation process of the Community-based Therapeutic Care programme and not the communication strategies and perceptions of the mothers that are used. The study also was not confined to Chinama Hills Hospital but was going to be conducted in three Health centres of Lusaka District. The research design that was to be used was a descriptive survey and not an attachment design.

Deconinck (2008) conducted a study on Integration of Community Management of Acute Malnutrition (CMAM) into National Health Systems. The objectives of the study were to assess integration of CMAM into the national health systems and factors that influence level of integration, and to document challenges of integration and lessons learned.

Deconinck's study and the current study diverge on two points. The first being that Deconicks study was conducted in Malawi, Ethiopia and Niger while this study was conducted in Zambia. The second divergence was on some of the objectives. Deconincks first two objectives where: i) to assess integration of CMAM into the national health systems; and ii) to ascertain factors that influence level of integration. On the other hand, the first objective of the current study was to establish the formulation process of the CTC programme and the second was to establish the implementation process of the Community-based Therapeutic Care Programme. The point of convergence is on the last objective which was to document challenges of integration and lessons learned. This study also had its third objective focused on determining the constraints encountered during the implementation process of the CTC programme. Deconinck's study revealed the following as challenges "health infrastructure undermined by lack of qualified health staff and high staff turn-over. Need for financial resource commitment to support CMAM at all levels, including supplies. Supply interruptions negatively affected programming. Lack of standardised protocols and weak monitoring and reporting systems. Issues of community access, e.g., distance from health facilities, preference of traditional care system. Poor understanding of malnutrition at the community level (i.e. not perceived as a medical or dietary problem)."

Tekeste et al (2012), undertook a study in Ethiopia in Sidima Zone. This study was aimed at determining the cost effectiveness of CTC for children with Severe Acute Malnutrition (SAM) compared to facility based Therapeutic Feeding Center (TFC). This study was a retrospective comparative study.

Bachmann (2009) also conducted a study on Cost effectiveness of community-based therapeutic care for children with severe acute malnutrition in Zambia: decision tree model. This study estimated the cost effectiveness of Community-based Therapeutic Care (CTC) for children with severe acute malnutrition in government primary health care centers in Lusaka, Zambia, compared to no care. This study aimed at describing the outcomes of CTC in Lusaka, estimating the costs of CTC and lastly estimated the effectiveness and cost effectiveness of this type of CTC, compared to no treatment.

These two studies by Tekeste et al (2012) and Bachmann (2009) focused on CTC but in particular the cost effectiveness. They differed from the current study in that they do not focus on how the CTC programme was formulated and how it was being implemented. The constraints that were encountered in the implementation process were not stipulated. Instead, their main focus was on the cost effectiveness of the CTC programme. Tskeste's study was not conducted in Zambia while Bachmann whose study was conducted in Zambia did not focus on specific health centers.

2.3.5 Aspects of Programme Planning

The genesis of every programme has prior activities which are known as planning. In the perceptions of Liebenberg and Stewart (1997:36), planning*…is a process whereby attention is paid to identify and coordinating the long term goals and determining the short-term objectives which must be set in order to address an identified problem.* It can therefore be deduced that planning is a future oriented activity. For effective planning to take place, various stakeholders must be incorporated who can contribute their expertise and knowledge to the situation and come up with effective long term objectives for the programme. The various stakeholders have to come up with various strategies which will result in the availability of the needed resources to attain the stipulated goals. After decisions have been made, stakeholders are assigned with various responsibilities. Merriam and Brockett (1997: 20) posit that *…planning should incorporate assessing needs, setting objectives, organisational learning experiences to meet the objectives, implementation and evaluating results.*

i) Stakeholders Involvement in Programme Planning

Programme planning does not happen in seclusion but instead is done in collaboration. They are various factors that affect the planning process of a programme. Conyers and Hills (1990) point out social, administrative and political environments as factors that affect the planning process of a programme. It is therefore imperative to put into consideration the political system of the community, political ideology and political will of the government in power and the social structure of the society when planning programmes. In order for the planning process to be successful Caffarella (2002) stipulates that planners must be able to use negotiating skills in order to identify all stakeholders and power relations in their midst. Even though Braynant and White (1982: 234) draw attention to the engagement of stakeholders as likely to bring into being

tensions, the exercise is worthwhile. They proceed by stating that …*planning is a political process which involves particular rather than comprehensive interest, and both planner beneficiaries and politicians need to take part in it.* Rothwell, Sullivan and Mclean (1995: 177) sketch out some of the fundamental factors for successful planning:

a) *involve key stakeholders in the planning process;*
b) *evaluate relevant data ;*
c) *agree on what is to be changed or improved;*
d) *develop a system for monitoring and managing the change process; and*
e) *clarify change roles.*

ii) Conducting a needs assessment

The process used in the identification of knowledge, skills and understanding of the requirements needed to attain a goal is referred to as needs assessment (Gupta, 1999). Molenda, Pershing and Reigiluth (1996: 42) posit that needs assessment relates to … *the method of finding out the nature and extent of performance problems and how they can be solved*. A needs assessment is one of the first steps to be undertaken when planning programmes. Vella (1994) stipulates that in order for a planner to know what people want from a project and what they already know, a baseline study is to be conducted. She further brings to light that in order to have a project that is immediately useful to the learners it is imperative to listen to the learners.

Rodgers (1992: 148) draws attention to four ways of how a needs assessment can be conducted

> *The first type is the 'satellite observation' which is a study where the change agent determines the needs of the community without going to the community. The second type is 'space invaders' approach. This is where a group of visiting experts flock into the community to find out what the needs of the community might be without involving the community in those studies. The third way is the 'explores' approach where experts involve a group of community members to get ideas about what is happening in the community. After this they go away to write their reports. The last approach is the 'surveyor-in-residence'. The experts spend some time in the community listening to what the people say and*

try to have a real feel of what is taking place in the community. The community is seen as having insights that can be shared with experts.

A needs assessment ought to be planned so as to determine the people that will participate, methods that will be implored and when the needs assessment will be conducted. The availability of this information is vital in the planning of a programme (Gupta, 1999).

iii) Programme Objectives

Caffarella (2002), states that the definition of programme objectives goes beyond stating the knowledge and skill that is to be attained and the expected results. Programme objectives must *reflect both what the participants will learn and the resulting changes from that learning as well as the operational aspects of the programmed* (Cafarella, 1994: 20). She further states that objectives must be representative of both the measurable and non-measurable outcomes. These objectives must be clearly written so that all the stakeholders understand them and if need be negotiate as they improve the quality and the quantity of the programmes resources. Furthermore they serve … *as an internal consistency and 'do-ability' check point* (Caffarella, 2002: 370).

iv) Formulating Monitoring plans

During the planning process of a programme, objectives and activities to be undertaken must be clearly stipulated as well as the necessary resources. Caffarella (1994: 20)

encourages planners to also ensure that monitoring approaches that will be used should be outlined up front, together with the informal or unplanned monitoring opportunities. Anything unplanned that crops up will fall under lessons that have been learned, that can be used for future projects.

Rubin (1998) emphasizes that successful programmes are based on the stakeholder's knowledge of their roles and responsibilities. It is imperative that every stakeholder identifies what component of the programme needs to be assessed and the criteria for assessment. Setting of success indicators should be done in collaboration. Various methods of addressing challenges must be incorporated in the plan so that stakeholders can negotiate their monitoring expectations at an early stage.

v) Implementation

Implementation for Conyers and Hills (1990: 145 – 155) is defined as;

…the whole process of translating broad policy goals or objectives into invisible results in the form of specific projects programmes of action. It is

concerned with what happens after the actions required achieving specific goals or objectives have been identified and presented in form of 'plans'…that is with the process of actively carrying out these actions.

Social interventions have a meaningful outcome on a variety of issues such as education, employment and health. In an event that there is a change to the implementation of a programme, it is bound to have an effect on the outcome of a programme thereby making it imperative that the implementers of a programme adhere to the implementation strategies that have been put in place.

Old et al (2003), echo the above statements by stating that any minor change to the implementation of a social intervention can often make a major difference in the size of the intervention. Rigorous studies have been conducted on how best a programme or social intervention can be implemented. For instance, Smith (2006:340-345) indicates that in order to ensure successful implementation of an evidence based intervention, the following are the steps to be taken:

Step 1: Select an appropriate evidence-based intervention;

Step 2: Identify resources that can help with successful implementation;

Step 3: Identify appropriate implementation sites;

Step 4: Identify key features of the intervention that must be closely adhered to and monitored; and

Step 5: Implement a system to ensure close adherence to these key features.

However, Conyers and Hills (1990: 145-155), highlighted the following factors as being influential to the implementation process of programmes;

a) *the nature of the planning process;*
b) *organisation of the planning process;*
c) *content of plans; and*
d) *management of implementation.*

Prior to implementation, a pilot test of the plan must be conducted using a small group of people. This step is usually overlooked due to budget constraints. Rubin (1998: 44) emphasizes the importance of conducting a pilot test by saying *testing gives you the confidence of knowing that you are not wasting your time, effort and money by ensuring that your messages are understood.*

He further says that there is a possibility of adaptation after testing the plan, if it happens that the probable outcomes are not obtained or in an event that the target group interpreted the exercise differently. After modifications have been made to the plan, it can therefore be considered as ready for implementation.

vi) Monitoring

For every programme that is undertaken, there has to be a mechanism which will indicate as to whether or not the programme is on course. The process of checking, whether or not the programme is on course is called monitoring. Liebenberg and Stewart (1997: 52), allude to monitoring as … *ensuring that action programmes pursue the given objectives within the framework of the plan as designed.* They ensue by saying it is a continuous, methodical procedure of data collection and information throughout a programme. The information gathered can be used in the in making adjustments to the programme when need arises. Monitoring can in addition be used in the identification of trends in a programme. Lastly, they say that the key to successfully implementation is inclusion of monitoring to the planning process of a programme as it gives an allowance to various stakeholders to strategies on how best a programme can be monitored.

Bellg, Borrelli and Resnick (2004) suggest that the following as areas of a programme that must be monitored: the extent of overall intervention implementation process, any changes in intervention implementation during a programme and consistency of intervention delivery among different providers.

vii) Constraints

There are various constraints that can inhibit the implementation process of a programme. One of the most decisive elements affecting the success of any innovation is the availability of comprehensive and skilled administrative and management support. Without clearly assigned roles, a defined organizational structure, and close monitoring, a project may fail to achieve its prospective aims. Some have argued that inability to appreciate the effects of these dynamics on efforts to adequately plan and manage the change process may ensure failure (Fullan, Cuttress, and Kilcher, 2005). By employing effective processes for communication, as well as tracking and monitoring progress according to time and budget constraints, implementers will be able to ensure accountability and the efficient use of resources (Vince, 2005).

Time can influence the implementation of a health programme in that results from a preventive action cannot be spotted immediately. Other results can take from months to years for the benefits to become perceptible. This time-lag makes it intricate for the public to relate a preventive action to a positive outcome (Currie et al, 2012). Programmes also fail to work because of the manager's inability to estimate time and whether their staff and system are ready to take it on (Cohen, 1996).

Durlak and Dupre (2008 : 340) further state that …*funding, a positive work climate, shared decision-making, coordination with other agencies, formulation of tasks, leadership, programme champions, administrative support, providers' skill proficiency, training, and technical assistance*….'' are factors that affect the implementation process of a programme. In terms of training Bellg, Borrelli and Resnick (2004) state that standardized training can increase the chances of an intervention to be delivered consistently. They further state that despite the stress on standardized training, providers of training should remain adequately individualized; this is in order to account for diverse levels of education and experience. In addition, the providers should be trained multiple times during a programme. Their argument is that it helps the provider maintain their skill and keep them on track.

2.4 Summary of Chapter 2

This chapter narrated a historical overview of CTC. It provided a discussion on malnutrition and what it is. This chapter also gave a description of CTC programme and critiqued studies related to CTC. It showed how the current study differed with the past studies.

The next chapter discusses the methodology that was used in this study

CHAPTER THREE: METHODLOGY

3.1. Overview

This Chapter presents the methodology that was employed in the study. Methodology is defined *as the activity or business of choosing, reflecting upon, evaluating and justifying the methods you use in data collection* (Wellington. 2000:22). According to Remenyi et al (1998), research methodology is a framework which provides a systematic way of solving a research problem. *The role of the methodology is to carry on the research work in a scientific and valid manner…. Research methodology involves such general activities as identifying problems, review of the literature, formulating hypotheses, procedure for testing hypotheses, measurement, data collection analysis of data, interpreting results and drawing conclusions* (Singh, 2006:79). In addition, Kothari (2004) states that the research methodology does not only look at the research methods that will be used, but also the logic behind the choice of the methods. He further says that an explanation as to why a particular technique has been adopted over the other must be stated.

Thus, the following elements were part of the methodology used in this study: research design, universe population, sample size and sampling techniques, data collection procedure, data collection instrument, data analysis instruments and ethical consideration.

3.2. Research Design

Before data collection and analysis, there was need for a researcher to adopt a research design that gave guidance on how the data was to be collected and analysed. A research design is a design that … *specifies the methods and procedure for conducting a particular study (*Beri, 2007: 51).Moore and McCabe (1989:89) note that …*a research design can be understood as planning of any scientific research from the first to the last step. In this wide sense, it is designed to guide the research in collecting, analyzing and interpreting observed facts. The research design specifies which of the various types of research approach to be adopted.* Research designs can be grouped in three categories, namely explanatory studies, descriptive research and casual research. In order to select a research design that is suitable for a research, factors such as the nature of the problem, and the scope of the proposed study must be put into consideration (Beri,

2007: 51). Therefore, the purpose of the research design is to ensure that the evidence obtained answers to the research questions.

The research design adopted was descriptive survey. Sim and Wright (2000:69) noted that:

> *In general a descriptive study is designed to collect information on areas such as the biological or psychological characteristics of individuals, the nature of particular social structures, practices or processes, the prevalence and distribution of certain health states, or the arrangement and functioning of particular institutions and organizations.*

As Bryman (2004) observes, this design is relevant since it gives an allowance of collecting data on more than one case at a particular point in time in order to collect data from two or more variables, when examined patterns of association of behavior that may be difficult to observe from large population. Sim and Wright (2000) further stipulate that data collected from a descriptive study can either be quantitative or be a combination of quantitative or qualitative. It is uncommon for a descriptive study to exclusively or even predominately rely on qualitative data. It was therefore hoped that through the adoption of this design the research would capture in-depth information.

In order to consolidate the data that was collected from various sources, both qualitative and quantitative methods were used. This is called triangulation. Triangulation is a method that is used to enhance the validity of a research by employing multiple methods, data sources, theories and researchers (Farmer, Robinson, Elliot and Eyles, 2006). Triangulation enables the researcher to examine data through the application of different methods, different sources and various researchers on a team or findings emanating from different procedures of analysis (Creswell, 2003). This is imperative in a research as it may contribute information that may be unobtainable through the use of a single method (Speziale and Carpneter, 2007). For this study, the researcher used triangulation in the following areas: data collection methods and data analysis. Triangulation of data collection methods integrates the use of more than one method of data collection within a single study (Holcomb and Andrew, 2005). The advantage of triangulation of methods is that … *the weakness of one method can be compensated for by the strength of the other* (Holcomb and Andrew, 2005: 76). Thus a combination of three data collection methods, a

semi structured questionnaire, document review and focus group discussion were used for this study. On the other hand, triangulation of data analysis procedures integrates two or more approaches from the same data for validity purposes. Merriam et al (1984: 24) simplify qualitative data as *data that can be coded and represented by statistical scores.* Common responses from the participants and findings from document review were grouped into themes which are a reflection of specific thought and can be used to provide an overall description of the participants' views (McMillan and Schumacher, 2001). The study therefore employed the use of themes to analysis qualitative data. On the other hand quantitative data was analysed manually and presented with the help of Excel.

3.3. Population

Moore and McCabe (1989) refer to a population as a complete set of objects or group of people that are about to be researched. Hair et al (2011: 165) define a population as … *the complete group of objects or elements that are relevant to the research project.* In addition, Burns & Grove (2003:43) posit that population is …*relevant because they possess the information the research project is designed to collect. The population includes all elements that meet a certain criteria for inclusion in a study*. Hair (2011) contends that the selection of the population is based on the knowledge of the topic of interest, access to elements (individuals, companies and many more), availability of elements and the time frame. Therefore the elements that comprised the population were nutritionists from the Lusaka District Health Management Team, Health Workers and Care Givers who were part to the Community-based Therapeutic Care Programme at selected health centres namely Chaisa, Chipata and Garden.

3.4. Sample Size and Sampling Procedure

3.4.1 Sample Size

A sample, as stated by Moore and Mcbee (1989), is a subset of the entire population from which information will be gathered. Gratton and Jones (2010: 110), share the same view by stating that*a sample is a subset of a specific population.* The selection of a sample is done from the target population or accessible population (Burns & Grove 2003:233). According to singh (2006:81), sampling is:

> *…indispensable technique of behavioral research; the research work cannot be undertaken without use of sampling. The study of the total population is not possible and it is also impracticable. The practical limitation: cost, time and other factors which are usually operative in the situation stand in the way of studying the total population. The concept of sampling has been introduced with a view to making the research findings economical and accurate.*

Merriam (2002:28) say that *a sample is selected precisely because the researcher wishes to understand the particular population in depth and not to find out what is generally true among many.* Thus, the sample size for this study was 135 respondents. This was segmented as follows: three (3) Nutritionists from Lusaka District Health Management Team; twenty three (23) Health Workers and one hundred and nine (109) Care Givers who were members of the Community-based Therapeutic Care Programme.

3.4.2. Sampling Procedure

Sampling procedure is a method that is used to pick a sample from the target population. They are various sampling methods that this study can adopt and they can be bifurcated into probability and non-probability sampling. *In probability sampling, each member has a non-zero probability of being chosen, whereas in non-probability sampling it is the opposite, with each member selected from the population in a random manner* (Ary, Jacobs and Razzvich, 1996: 177-181). The main aim of a sampling procedure is *…to produce a group that is representative of the population in order to be able to make accurate generalizations about the population* (Cargan, 2007: 236). For this study, purposive and simple random samplings techniques were used to pick the sample.

According to Singleton, (1988: 153), purposive sampling is defined as *a technique ... based entirely on the judgment of the researcher, in that the sample is composed of elements which contain the most characteristic, representative of typical attributes of the population.* Cohen and Manion (1994: 89) support this definition and add, *researchers handpick the cases to be included in the sample on the basis of their judgment….* Patton (1990: 89), in addition to Singleton's statement, says that *the logic and power of purposive sampling lies in selecting information-rich cases for study in-depth to be included in the sample on the basis of their judgment of their*

typicality. Information rich cases are those from which one can learn a great deal about issues' of central importance to the purpose of the research, thus the purpose of purposive sampling is to select information-rich cases whose study will illuminate the questions under study. Thus, three (3) Nutritionists were selected using purposive sampling because they had the knowledge on how the Community-based Therapeutic Care Programme was formulated and how it is supposed to be implemented. Twenty Three (23) Health workers were selected using purposive sampling because they are the ones in charge of the implementation process of the Community-based Therapeutic Care programme (CTC).

Bhattacherjee (2012) defines simple random sampling as a sampling technique in which all the units in a population are given an equal chance to be part of the sample. In order to conduct this sampling, it is imperative that the researcher has the complete sampling frame. Simple random sampling can occur with or without replacement. With replacement sampling the individuals or units that are selected to participate in the study, are returned in the pool from which the sample was drawn. Simple random sampling conducted without replacement yields estimates that are more precise (Loue, 1999). For this study a sample of 109 care givers who are part of the CTC programme were picked using simple random sampling. The researcher used pieces of paper which had yes and no written on them, they were all of the same colour and shape. The papers were placed in a cup and each care giver was given a chance to pick a paper from the cup but was not allowed to return it in the cup. Since this study was conducted in 3 health centers, the caregivers were distributed as follows: Chaisa 40, Mandevu 30 and Garden 39.

3.5. Data Collection Procedure

The genesis of the data collection procedure was done through the attainment of an introductory letter from the Postgraduate Studies at the University of Zambia. This letter was presented to the Lusaka District Medical Officer based at the Lusaka District Health Management Team (LDHMT) and the permanent secretary at the Ministry of Community Development Mother and Child Health (MCDMCH). These were either going to grant or deny the researcher consent to collect data from Chaisa, Mandevu and Garden health centers. Consent was granted based on the fact that the Community-based Therapeutic Care program which was under study falls under the MCDMCH and LDHMT. Therefore, the research findings were going to be of relevance to the ministry and LDHMT. Upon arrival at the clinic, the introductory letter from the University of

Zambia Postgraduate Studies and letter of consent from MCDMCH and LDHMT were presented to the sisters in charge who gave the go ahead to the distribution of questionnaires and conducting of focus group discussion. The data collection procedure had some flaws of which the researcher had to establish ways of getting passed them.

The attainment of a consent letter from the MCDMCH was a challenge to the researcher. The introductory letter from the University of Zambia that was presented to the permanent secretary was redirected to the Ministry of Education (MOE) seeing that the researcher belonged to the School of Education and therefore could not carry out a research in their Ministry. In order to be granted a consent letter, the researcher had to provide details on what the study was about seeing that the Community-based Therapeutic Care programme falls under the MCDMCH and not the MOE.

Kish (1965) warns of sample selection bias which results from selected individuals not participating, a factor which could compromise the validity of the results. In this research the possibility of research target participants not turning up was minimized through making appointments with selected nutritionist from LDHMT; health workers and all the care givers who were part of the CTC programme.

During data collection, effective communication and decoding is believed to be a hiccup to the study. In order to overcome this Merriam (1988) suggests that a researcher must establish rapport, to ask good questions that elicit richly descriptive interview responses, and to listen effectively. Thus the researcher listened carefully and asked questions that yielded information that was rich. Patton (1990: 201) adds that the ability "*to write descriptively, practice the disciplined recording of field notes; knowing how to separate detail from trivial in order to achieve the former without being overwhelmed by the latter; and using rigorous methods to validate observation".* Therefore the researcher took down notes that were of relevance to the study and made recordings of the focus group discussions.

3.6. Data Collection Instruments

Data collection refers to the process of finding information for the research problems. It may involve administering a questionnaire, conducting an interview or a focus group discussion or observing what's going on among the subjects of the study (Kumar, 1999: 148).

In order to capture both qualitative and quantitative data, a questionnaire, document review and focus group discussion were used.

3.6.1. Questionnaire

A method of data collection used in cases of big enquiries. It consists of a number of questions printed or typed in a definite order on a form or set of forms (Kothari, 2004). According to Fife-Schaw (2001) cited in Adejimi, Oyedrian and Ogunsanmi (2010), the advantage of using a questionnaire is that it is simple, versatile and is not costly. For this study a semi structured questionnaire was used. A semi structured questionnaire is one that consists of both open ended and closed-ended question. This allows for data collection of large data (Fraenkel and Wallen, 1993). The semi structured questionnaires were administered to the 3 nutritionist at LDHMT, 79 Caregivers and 23 health workers directly.

3.6.2. Focus Group Discussion

A focus group discussion is a *carefully planned discussion designed to obtain perceptions on a defined area of interest in a persuasive non threatening environment* (Kringy et al, 1990 : 24). According to Parahoo (1997:296), a focus group discussion is *an interaction between one or more researchers and more than one participant for the purpose of collecting data.* Kringy et al (1990) also noted that the advantage of a focus group discussion is that it has the ability to bring into being important information that might not be retrieved using a questionnaire. The focus groups consisted of 6 to 12 members. To capture every detail of information, the researcher used a tape recorder to record the discussion and also took down notes as the discussion was in progress. 30 care givers participated in the focus group discussions which lasted for an hour only.

3.6.3 Document Review

Document review is a way of collecting data by reviewing existing documents. The documents may be internal to a program or organization … or may be external….. Documents may be hard copy or electronic and may include reports, program logs, performance ratings, funding proposals, meeting minutes, newsletters, and marketing materials(Evaluation Research Team, 2009:1). WBI Evaluation Group (2007: 1) define document review as *…a systematic procedure*

for identifying, analyzing and deriving useful information from these existing documents. The Evaluation Research Team (2009) state that reviewing a document provides background information on the history, philosophy and operation of a programme that is being analysed. They further state that reviewing of documents may reveal a difference between formal statements of a programme purpose and its actual implementation. Thus for this study, the researcher reviewed documents from Ministry of Health and Presentations that were made at the International Workshop on the Integration of Community Based Management of Acute Malnutrition held in Washington DC to gather information on the formulation process of the Community-based Therapeutic Care Programme in Zambia.

3.7 Data Analysis

Data analysis is a mechanism for reducing and organising data to produce findings that require interpretation by the researcher (Burns & Grove 2003:479). Gosh (1992: 261) posits that …*after collection of research data, an analysis of the data and the interpretation of results are necessary*. Merriam and Simpson (1995) add that it can also mean categorizing, ordering and summarizing the data and describing them in meaningful terms. This study had both qualitative and quantitative data.

3.7.1 Qualitative

Qualitative data are detailed descriptions of situations, events, people, interactions and observed behaviors; direct quotations from people about their experiences, documents, correspondence, records and case histories (Merriam and Simpson, 1995). Burns and Grove (2003:19) describe a qualitative approach as "*a systematic subjective approach used to describe life experiences and situations to give them meaning"*. Parahoo (1997:59) states that … *qualitative research focuses on the experiences of people as well as stressing uniqueness of the individual.* In order to analyses qualitative data, the researcher used codes based on the themes that emerged. The researcher identified key concepts and ideas that were hidden within the textual data that were related to the phenomenon under study to develop codes. After the development of the codes the researcher examined the raw textual data line by line in order to identify incidents, events, ideas, perceptions to come up with themes.

3.7.2 Quantitative

Quantitative data is data that is collected in quantities or in a numerical manner (Babikir et al, nd). Quantitative measurements use objective and standardized instruments to limit data collection to prescribe categories of response (Merriam and Simpson, 1995). In this study, quantitative data was analysed manually and was presented using tables, percentages and graphs with the help of Excel.

3.8 Ethical Consideration

Hesse-Bieber & leavy (2006) cited in Cresswell (2009) state that it is imperative for a researcher to anticipate the ethical issues that may arise during research. Research involves the collection of data from people and about people (Punch, 2005). *Writing about these issues is required in making an argument for a study as well as being an important topic in the format proposals. Researchers need to protect their research participants; develop trust with them; promote the integrity of the research; guard against misconduct and impropriety that might reflect their organizations or institutions cope with new, challenging problems* (Isreal and Hay, 2006 cited in Creswell, 2009: 87). In conducting the study among the participants, permission was sought from relevant authorities in the Health Centers, Lusaka District Health Management Team and the Ministry of Community Development Mother and Child before administering the various research instruments. Assurance was given that no harm either emotional or physical would be inflicted on the respondents. Further, an assurance was given that the findings of research were to be used for academic purposes only and that confidentiality was going to be maintained and names of subjects withheld. In order to show compliance to participating in the research, the selected respondents signed a consent form. Respondents also had the option to terminating their participation if they so wished.

3.9. Summary

This chapter provided a discussion on the research methodology that was employed in the study. A descriptive survey research design was used in the study because it involves asking the respondents for information using a questionnaire and focus group discussion. Both quantitative and qualitative approaches were used to collect data and analyse data to ensure validity and credibility of data. A sample of a 135 people was selected. The sample consisted of 3

nutritionists from Lusaka District Health Management Team, 23 health workers and 109 care givers. Purposive sampling was used to select the nutritionists and health workers, and simple random sampling was used to select the care givers. Quantitative data was analysed manually and presented using graphs, tables and percentages while qualitative data was coded based on themes that emerged.

CHAPTER FOUR: PRESENTATION OF FINDINGS

4.1 Overview

The preceding chapter discussed the methodology that was used for this study. This chapter presents findings of the study based on the following research questions: how was the Community-based Therapeutic Care programme formulated?(ii) How was the Community-based Therapeutic Care programme being implemented? (iii)What constraints where encountered during the implementation process of Community-based Therapeutic Care Programmes? And (iv) what were the respondents recommended solutions to the constraints that were encountered during the implementation process of the Community-based Therapeutic Care Programme? After the presentation of findings a summary of the chapter will be given.

4.2 Respondents Bio data

Figure 1:Respondents Sex

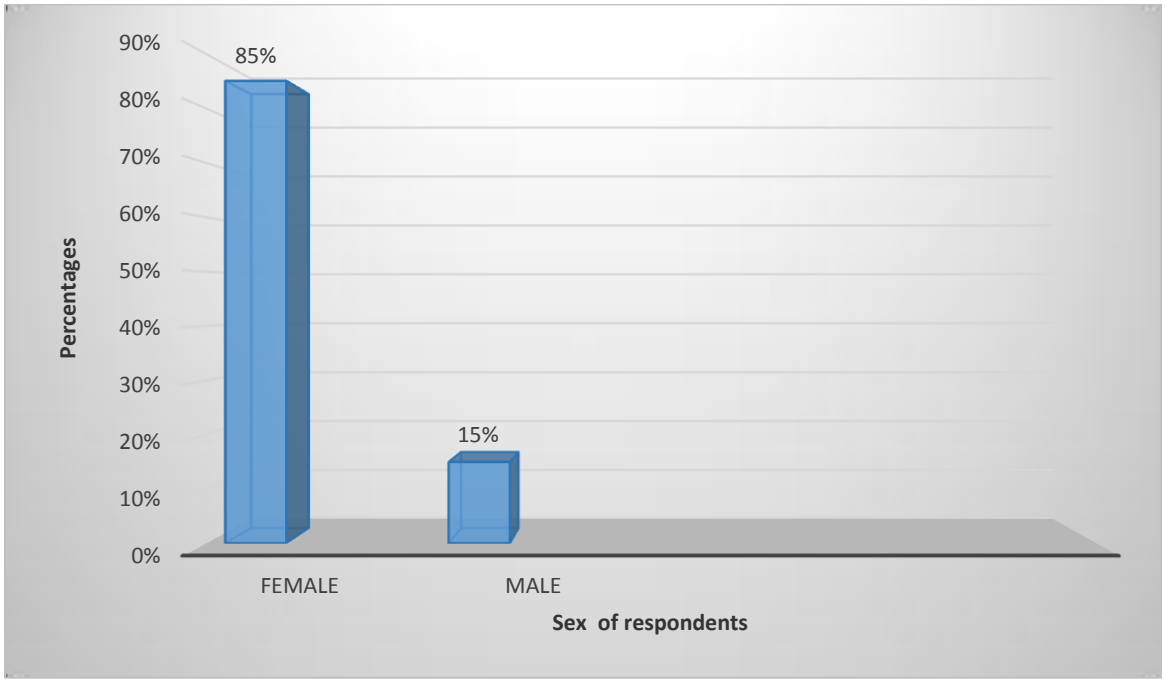


Figure 1 above shows that 115 (85%) respondents were female and 20 (15%) were male bringing the total sum of respondents to 135.

Figure 2: Distribution of respondents by their health centers

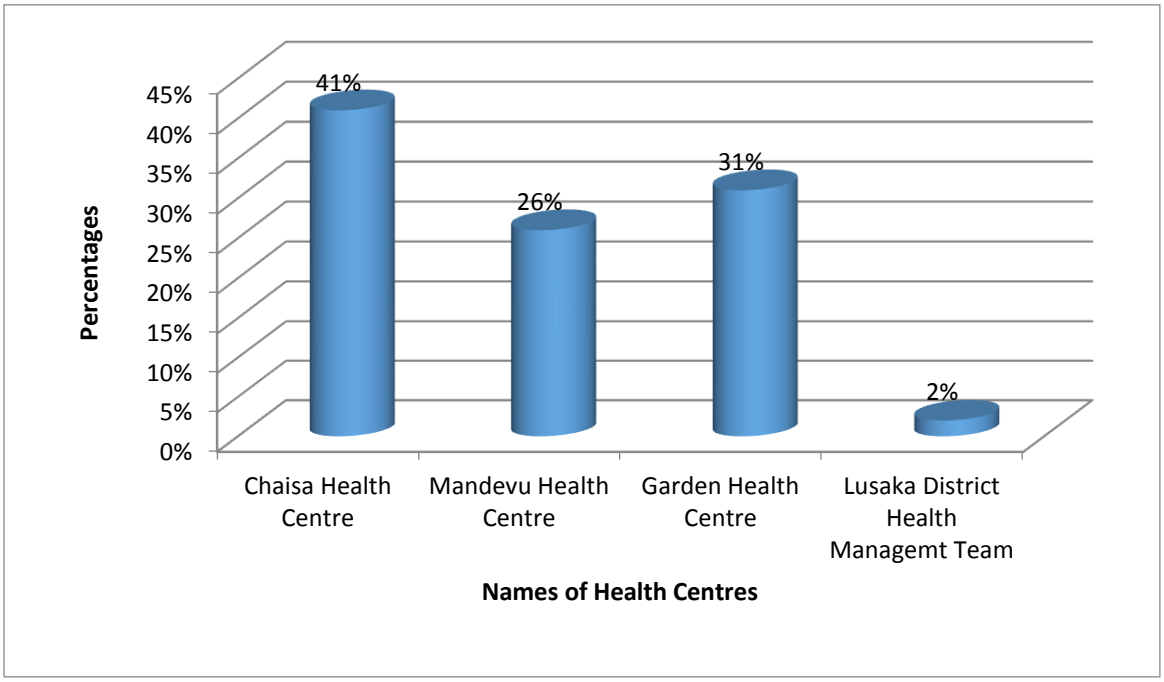


Figure 2 above shows the distribution of respondents by their health centres. 55 (41%) came from Chaisa Health Centre, 35 (26%) Mandevu Health Centre, 42 (31%) Garden Health Centre and 3(2%) from Lusaka District Health Management Team (LDHMT). Therefore, the total sum of respondents for this study was 135.

4.3 Findings Based on Research Questions

This section presents findings obtained from semi-structured questionnaires and focus group discussion. In order to analyse the CTC Programme, the researcher collected both qualitative and quantitative data regarding the formulation of the Community-based Therapeutic Care programme, its implementation process, the constraints that are encountered during the implementation of the CTC Programme and the respondents suggested solutions to the constraints being encountered during the implementation process of the CTC programme. The respondents included 109 Caregivers, 23 Health Workers and 3 Nutritionists from the Lusaka District Health Management Team.

4.3.1 Research Question 1: how was the Community-based Therapeutic Care programme formulated?

The first research question sought to ascertain how the Community-based Therapeutic Care (CTC) Programme was formulated. In order to answer this research question, open ended questions in a semi-structured questionnaire were administered to the nutritionist from Lusaka District Health Management Team that yielded qualitative data and a document from Ministry of Health was reviewed that generated qualitative data as well.

a) Findings from nutritionists based at Lusaka District Health Management Team

There was a consensus among the three nutritionists that the CTC programme was formulated because of the escalating malnutrition cases. Talking about its formulation, one Nutritionist stated: *It was formulated upon seeing the number of cases in the community increases and becoz they were too many cases refered to UTH AO7*. Thus, it was deduced that the CTC programme was formulated after cases of malnutrition in Lusaka District assumed an upward swing.

Another probe was made to ascertain whether or not the community members participated in the formulation of the CTC programme of which all the three Nutritionist responded in the affirmative. Although the respondents agreed that the community members took part in the formulation of the CTC programme, their responses indicated that the community members took part only in the implementation process. In talking about the participation of the community members in the formulation process of the CTC programme one of the nutritionists said *Community volunteers and traditional healers were trained in the implementation of the CTC programme.* Another nutritionist revealed that *"they were sensitized about the program….*These statements therefore mean that the community members only participated in the implementation and not the formulation.

The formulation of the CTC programme also saw the involvement of stakeholders namely Valid International, Ministry of Health and National Food and Nutrition Commission (NFNC). Their participation was through the training of health workers and community based volunteers. They also supplied the ready to use therapeutic food commonly known as plumpy nut in the health centers. The stakeholders facilitated the opening up of the CTC programme in all the health centers in Lusaka District.

The nutritionists were asked whether or not the CTC programme can be implemented nationwide to which they all responded in the affirmative. They indicated that for as long as there was a community and children in existence it can be implemented. One of nutritionist gave the following reason as why the CTC programme can be implemented nationwide *CTC program involves the community and it incorporates community based activities like cooking demonstration, gardening….Infant and Young Child Feeding.*

b) Findings from document review.

Findings from document review revealed that the CTC, which was known as CMAM (Community-based Management of Acute Malnutrition) programme, was formulated after the increase of malnutrition cases at the University Teaching Hospital. The increase in such cases was attributed to lack of district hospitals where the children could be attended to. The rates of recovery were poor due to the fact that the health personnel were in adequate to handle the escalating cases of malnutrition. Because of this the Ministry of Health and Valid International began to formulate the CTC programme. A document by Muleya (2008: 9) revealed that:

> *With no district hospitals in Lusaka, malnourished children were referred directly from primary to tertiary care at the main university teaching hospital. There were over 2,500 admissions with severe acute malnutrition annually. Recovery rates were poor (50-60 percent) and the limited numbers of staff were overwhelmed by high caseloads. Children were referred late and were usually extremely ill, leading to high death rates. MoH and Valid International started the process of introducing CMAM.*

The review of the document further revealed that the establishment of the CTC programme was unusual because it was not as a result of a response to an emergency like it was in other countries such as Ethiopia. As Muleya (2008:10) revealed in her document, *the process of establishing CMAM in Lusaka was unusual in that there was no emergency response prior to integration of CMAM within the MoH structure.*

It was further established that the health workers were trained in the management of the CTC programme. Logistical support was provided by Valid International while the Ministry of Health (MoH) took over the distribution of ready to use therapeutic food. As Muleya (2008) state:

existing health staff and community volunteers trained in the CMAM approach were responsible for the management of CMAM, with technical and logistical support provided by Valid International. MoH took over the storage and distribution of RUTF.

The review of the document revealed that the CTC programme can be adopted nationwide. As Muleya (2008: 10) posits although *the Lusaka programme suffers from many of the constraints faced by other CMAM programmes… this approach has proven to be effective and may be transferable to other settings….*

4.3.1.1 Summary of findings of research question one

Question one sought to reveal answers on how the Community-based Therapeutic Care Programme was formulated in Zambia. Based on the findings, it was established that the formulation of the CTC programme was initiated by Valid International, Ministry of Health and National Food and Nutrition Commission. The formulation process of the CTC programme in Zambia was unusual as it was not a response to an emergency. Members of the community did not participate in the formulation of the CTC programme but instead participated in the implementation process of the CTC programme after having been trained by the initiators of the programme. The CTC programme was established after the increase of malnutrition cases in Lusaka District. The initiators of the programme provided training for health workers and community based volunteers on how to implement the programme. Furthermore, the initiators facilitated the setting up of the CTC programme in various health centers in Lusaka District and are also the providers of the Ready To Use Therapeutic Food known as plumpy nut in the health centers. Lastly, this programme can be adopted nationwide.

4.3.2Research Question 2: how was the Community-based Therapeutic Care programme being implemented?

The second research question was: how is the CTC programme being implemented? To answer this question, information was retrieved from care givers, health workers and nutritionists from Lusaka District Health Management Team (LDHMT) through the use of a semi-structured questionnaire and focus group discussion which gave quantitative and qualitative responses. In order to establish how the CTC programme was being implemented the Care givers were asked how they became members of the CTC programme.

a)Findings from caregivers

The care givers were asked how they became members of the CTC programme. The general response was that they became members of the CTC programme after they noticed that their children had started losing weight and as a result they became underweight. The caregivers indicated that they were introduced to the CTC programme by Nurses, Community Health Volunteers and Neighbors in some cases. One of the respondents said: *My child was admitted on CTC program by a nurse due to his weight and health.* A respondent from the focus group discussion had this to say *ine mwana benze banamu gwila pamene nenze ninamuleta ku under five kuti ma kg yake siyenzo kwela buti kubwelela pambuyo.* (my child was admitted to the programme when i came for the under-five clinic because my child's weight started reducing*).*

b) Findings from Health Workers

The health workers indicated that the care givers become members of the CTC programme when the children are brought for the under-five clinics (for screening) and are found to be underweight or unhealthy. Aside from the under-five clinics, the health workers also pointed out growth monitoring points as places that are used to spot children that are underweight and are thus encouraged to be enrolled in the CTC programme.

c) Findings from Lusaka District Health Management Team (LDHMT) nutritionists.

The representatives from LDHMT indicated that selection of the care givers to the CTC programme was done when upon determining the eligibility of the child to be enrolled into the CTC programme. One of the nutritionists said that *children are measured and if they are eligible they are enrolled on the program.* They further contend that if a child is severely malnourished but does not have any medical complications, they are enrolled in the CTC programme.

4.3.2.1 Training Of CTC Implementers

The respondents were asked whether or not the implementers of the CTC programme were trained in implementing the CTC programme.

a) Findings from Health Workers

All the health workers were in agreement to the fact that the health workers who are in charge of the CTC programme were trained. It was established that the training was conducted prior to participating in the implementation of the CTC programme and at times after the health workers had started participating in the CTC programme. Furthermore, the respondents stated that training conducted at clinic level was conducted by the Senior Nutritionist Officer, Sister in Charge, and Lusaka District Health Management Team. One of the health workers in responding to who conducted the monitoring at the health centres said *it was conducted by the Senior Nutritionist Officer, DHMT and Sister incharge.*

b) Findings from LDHMT nutritionists.

The nutritionists from LDHMT were also in agreement that the health workers that implemented the CTC programme underwent training. One of the nutritionists said *yes they do undergo training.* They further made mention of Valid International, Ministry of Community Development Mother and Child Health and National Food and Nutrition Commission as being responsible for the training of CTC implementers at the Health Centres. Besides stating the names of the various providers of the training, they also made mention of the fact that this training was very helpful to the role implementers played in the CTC programme. One of the nutritionists said *the training the health workers go through is very good because they are able to teach the community members how to look after their children well.*

4.3.2.2 Community-based Therapeutic Care Target Group

The health workers and nutritionists from Lusaka District Health Management Team (LDHMT) were asked whether or not the CTC programme targets the intended individuals.

a)Findings from Health Workers and LDHMT nutritionists

It was noted that the CTC programme targets the intended participants. One respondent said: *I say yes reason being we assess who should be under the program clinical examinations of a child*. In addition, another respondent indicated that: *in CTC we don't allow normal children to attend only underweight and those with oedima.* Furthermore, another respondent had this to say: *when these children are enrolled in the CTC programme we teach them the kinds or types of*

food they supposed to feed the child for example plump nuts, porridge mix with groundnuts, bananas, oranges, milk etc. The above statement was supported by representatives from LDHMT who said that only the eligible (malnourished) children were selected to take part in the CTC programme

4.3.2.3 Delivery of the CTC programme

In order to establish how the CTC programme is being implemented, health workers and nutritionists from LDHMT were asked whether or not there had been any changes to the original plan of the CTC programme. This information was collected using a semi structured questionnaire that brought fourth quantitative and qualitative responses.

Table 1: Views on whether or not the CTC programme was being implemented according to the original plan.

Responses	**Health Workers**	**Nutritionists from LDHMT**
Yes	20 (87%)	3 (100%)
No	3 (13%)	
Total Number	**23**	**3**
Percentage	**100%**	**100%**

a)Findings from Health Workers

Table1 above shows that 20 (87%) respondents were of the view that the CTC programme was not being implemented according to the original plan. 3 (13%) were of the view that the CTC programme was still being implemented according to the original plan. Thus majority health workers (20 = 87%) were of the view that the CTC programme was not being implemented according to the original plan.

b) Findings from Lusaka District Health Management Team Nutritionists.

From table 1 above, it was noted that the 3 (100%) of the nutritionist at LDHMT were of the view that the CTC programme was not being implemented according to the original plan. This therefore means that all the nutritionists were in agreement that the CTC programme was not being implemented according to the original plan.

The health workers and nutritionists from LDHMT who were of the view that the CTC programme was not running according to the original plan were asked why they were of the view that the programme was not being implemented according to the original plan.

a) Findings from Health workers

From the findings, it was established that the programme was not being delivered according to the original plan because the nurse who was in charge of the CTC programme had died. One of the health workers said *the changes are there especially after the death of the nurse who was involved in the CTC programme*. It was also discovered that the nurse that had passed away was in charge of the CTC programme at Health Centers A and B, an aspect which negatively affected the delivery of the programme. In justification, one of the health workers said *i say so because there are a few nurses trained. If they were many we were not going to suffer after the death of a nurse who was trained.* This has resulted in the CTC sessions not taking place on a weekly basis as originally planned.

b)Findings from Lusaka District Management Team nutritionists

The nutritionists from LDHMT indicated that the Infant and Young Child Feeding Counselling sessions (IYCFC) have now been integrated into the CTC programme. Furthermore, the name Community Therapeutic Care has now been changed to Integrated Management of Acute Malnutrition (IMAM). This change has therefore had a positive impact on the CTC programme because all the health centers in Lusaka District are now screening for children suffering from malnutrition. Counseling of care givers has further strengthened the preventive measures of malnutrition.

4.3.2.4 Organisations that participated in the implementation process of CTC programme

In order to establish whether or not there were organisations that participated in the implementation process of the CTC programme, a semi structured questionnaire was administered to the health workers, nutritionist from LDHMT and care givers. The questionnaire bore both quantitative and qualitative responses. In addition, a focus group discussion was conducted with 10 care givers from each health centre which yielded qualitative data.

Table 2: Knowledge on whether or not organisations participated in the CTC programme.

Responses	**Health Workers**	**Nutritionists from LDHMT**	**Care givers**
Yes	23(100%)	3 (100%)	49 (62%)
No			22 (34%)
I don't Know			8 (12%)
Total number	**23**	**3**	**79**
Percentage %	**100%**	**100%**	**100%**

a)Findings from Health Workers

Table 2 above shows that all the health workers (23 = 100%) agreed that there were organisations that participated in the implementation of the CTC programme.

b) Findings from nutritionists based at Lusaka District Health Management Team

Table 2 above indicates that all the nutritionists (3 = 100%) unanimously agreed that there were organisations that participated in the implementation of the CTC programme.

c) Findings from the care givers

Table 2 above indicates that 49 (62%) of the care givers agreed that there were organisations that participated in the implementation process of the CTC programme. 22 (34%) indicated that there were no organisations that participated in the implementation process of the programme while 8

(12%) did not know whether or not there were any organisations involved in the implementation of the CTC programme. From the qualitative data that emanated from the focus group discussions with the care givers, some respondents said they did not know of any organisations that participated in the CTC programme while others said there were organisations that participated in the implementation of the programme.

A follow up question was asked to the respondents to state the names of the organisations that participated in the implementation process of the CTC programme. This information was retrieved using a semi structured questionnaire that was administered to the Health Workers, Care Givers and Nutritionists based at LDHMT. Focus group discussions were also conducted with some Care Givers

a)Findings from Lusaka District Health Management Team Nutritionists.

In response to the names of the organisations that participated in the implementation of the CTC programme, the nutritionists made mention of Valid International and National Food and Nutrition Commission as organisations that participated in the implementation process of the CTC programme. In addition to the named organisations the nutritionists indicated that the Ministry of Community Development Mother and Child Health (MCDMCH) also participated in the implementation of the CTC programme. Their participation was through the provision of training for the health workers and community volunteers, they also provided therapeutic food (plumpy nut) to health centers and lastly they helped setup the CTC programme in the health centers. One of the nutritionists said *MCDMCH provides training for health workers even the volunteers at the clinic. They also take plumpy nut to the clinics.*

b)Findings from Health Workers

Aside from the aforesaid, the health workers indicated Elizabeth Glaser Pediatric ADIS Foundation, Chesire, Mandevu Catholic and Women's Federation as other organisations that participated in the implementation process of the CTC programme. The organisations participated in the implementation of the CTC in various ways. The organisations participated through the provision of feeding supplements, conducting cooking demonstration and giving of incentives to the volunteers. One of the health workers noted that the organisations *cook for the children different types of foods according to nutrition and balanced diet.* In elaborating the

participation of organisations one of the respondents said *members of the organisations are usually available when these sessions for CTC are held. They make sure everything was done. There has never been a day they showed failure.* One of the health workers went on to say that "*before the CTC programme children use to die a lot of malnutrition after the CTC programme we have less deaths.*

c) Findings from care givers

The care givers indicated the following as the organisations that took part in the CTC programme, Elizabeth Glaser Pediatric ADIS Foundation, Chesire, Mandevu Catholic and Womens Federation. The respondents stated that the organisations participated by providing them with herps, teaching them how to prepare balanced diet for their children and providing plumpy nut. One of the Care Givers stated that *They provide us with herps (soya beans) and teaches us how to prepare a variety of diet for our children*. Another respondent said that *Catholic provides us with herbs while the other provides us with some food stuff that we use for cooking demonstrations during each CTC program*.

4.3.2.5 Monitoring of The CTC Programme

In the pursuit to further establish how the CTC programme is being implemented the health workers and nutritionist from LDHMT were asked whether or not the CTC programme was being monitored.

a) Findings from nutritionists based at Lusaka District Health Management Team.

The nutritionists from LDHMT were asked whether or not the CTC programme was being monitored. In response, they all agreed to the fact that the programme was being monitored. The nutritionists added that monitoring was conducted weekly. One of the nutritionist stated *the program is monitored on a weekly basis.*

b)Findings from health workers

The health workers agreed to the fact that the CTC programme was being monitored. They further stated that monitoring was done frequently. When the health workers were asked who monitors the Community-based Therapeutic Care programme, they indicated that it was the

sisters in charge at various health centers and some representatives from the Lusaka District Health Management Team. Health workers from clinic B held that in addition to the monitoring that was done by the sisters in charge and representatives from Lusaka District Health Management Team, Elizabeth Glaser AIDS Foundation also monitored the CTC programme.

4.3.2.6 Summary of findings on research question two.

Question two established how the CTC programme was being implemented in the selected health centers. Admission of care givers to the programme was conditional upon the health status of the child, particularly if found underweight and without complications then the child was admitted to the CTC programme, implying that it reaches the intended people. The Health Workers that participated in the CTC programme were trained. This training was conducted in two ways which were: prior to participation in the implementation process or after starting to participate in the implementation process of the programme. There were organisations that participated in the implementation process of the CTC programme namely: Valid International, National Food and Nutrition Commission, Elizabeth Glaser Pediatric AIDS foundation, Cheshire, Mandevu Catholic and Women Federation. Participation was done through the provision of food supplements, cooking demonstrations, setting up of the CTC programme in health centres and training of health personnel and community health volunteers. It was discovered that the CTC programme was not running according to the original plan, this has been as a result of the inclusion of the Infant and Young Child Feeding Counselling to the CTC programme and also the absence of trained nutritionists. The addition of the Infant and Young Child Feeding Counselling had a positive impact on the CTC programme in that the preventive measures of malnutrition were strengthened. The absence of trained nutritionist had a negative impact on the CTC programme in that some CTC sessions had to be cancelled because there was nobody to conduct the sessions. It was also revealed that the CTC programme is now being referred to as Integrated Management of Acute Malnutrition (IMAM). Lastly, the CTC programme is monitored on a frequent basis.

4.3.3 Research question 3: what constraints were encountered in the implementation of Community-based Therapeutic Care Programmes?

The third research question was; what constraints are encountered in the implementation of Community-based Therapeutic Care Programme? In order to determine the constraints encountered in implementing the CTC programme, a semi structured questionnaire and focus group discussion were used to capture both quantitative and qualitative information pertaining to the constraints. The answers were obtained from the Care Givers of the children, Health Workers and Nutritionists from Lusaka District Health Management Team.

Table 3: Respondents who had noticed challenges in the implementation process of the CTC programme.

Responses	Nutritionist from LDHMT	Health Workers	Care Givers
Yes	3 (100%)	23 (100%)	48 (61%)
No			31 (39%)
Total Number	3	23	79
Percentage %	100%	100%	100%

a) Findings from Health Workers

Table 3 above shows that all the health workers (23 = 100%) agreed that they had noticed challenges in the implementation of the CTC programme

b) Findings from nutritionists based at Lusaka District Management Team

Table 3 above indicates that the all the nutritionists (3 = 100%) agreed that they were challenges in the implementation of the CTC programme.

c) Findings from the care givers

Table 3 above indicates that 48 (61%) of the care givers agreed that they had noticed challenges in the implementation process of the CTC programme. 31 (39%) indicated that they had noticed

any challenges in the implementation process of the CTC programme. From the qualitative data that emanated from the focus group discussions with the care givers, some respondents said they did not notice any challenges in the implementation process of the CTC programme while others said they had noticed challenges. One of the care givers had the following to say *koma mavuto yeve mu ctc timayo ona.* (We do see the problems in the CTC programme). Another care giver stated that *ine kulibe olo vuto eli yonse yamene nima onapo, vonse chabe vili bwino.* (I don't see any problems, everything is okay).

a) Findings from Lusaka District Health Management Team nutritionists.

The nutritionists from Lusaka District Health Management Team (LDHMT) pointed out the following as constraints faced during the implementation process of the CTC programme: Some of the mothers' dropout of the programme. The transferring of CTC coordinators from one health centre to another has resulted in other health centres lacking CTC coordinators. The supply of ready to use therapeutic foods was not consistent. One of the nutritionists mentioned the following as a challenge: *erratic supply of ready to use therapeutic feeds (plumpy nut).*

b) Findings from health workers

The health workers cited the following as challenges they were facing in implementing the CTC programme: the Nurse that used to conduct the CTC programme in Clinics A and B passed away and as a result the caregivers are not attended to regularly. One of the health workers stated that *There are a few nurses trained were at clinic B we had a nurse who could come every Fridays from A Clinic But she Died. The programme has been affected.* The ready to use therapeutic foods known as plumpy nut that is given to the care givers was not always available and this had a negative effect on the children. One of the respondents said *When we have no plump nuts we see a lot of children suffering from malnutrition.* The cooking demonstrations that were conducted in order to educate the mothers did not take place in a consistent manner because the cooking ingredients were not always available. All the health care centers did not have a nutritionist that could implement the CTC programme as a result the local people (Community Health Workers) are engaged in the implementation of the CTC programme. The caregivers are usually in denial when their children are found to be underweight. One of the health workers said *we face situations where mothers don't believe that their children have malnutrition they go*

elsewere for some herbal medicine. It was also observed by the health workers that the myths known to some care givers hindered them from bringing their children to the clinic. One of the health workers said*... some mothers hide the children when they were swollen they said the hospital will kill their children.* There was usually a shortage of the supplements that were given to the caregivers of children who are malnourished, this also contributed to the cooking demonstrations not taking place. One of the nutritionists indicated that *at times cooking demonstrations are not done due to lack of incentives.*

c) Responses from caregivers

The following constraints were reported by the care givers. The attitude of the health workers towards the care givers is bad. One of the respondents indicated that *Some staffs incharge of CTC at times shout at us especially when you want to find out something.* The community members also complained about the lack of time keeping by the health workers. One respondent *said most of the times the people in charge of the program at time don't come in time.* Another respondent who seemed to agree with the lack of time keeping by health workers said *Time keeping by the health workers is very poor.* The care givers complained about the fact that the food which they were given was limited to only plumpy nut and that this plumpy nut was not always available. The shortage of health workers was also affecting them because on several occasions the CTC sessions were cancelled due to inadequate qualified staff at the health centers. It also needs to be pointed out that the CTC programme is only conducted once a week so in an event that the care giver has other commitments on the day the CTC sessions are held, the child does not receive plumpy nut for that week.

4.3.3.1 Measures to Address the Challenges

The nutritionists and health workers were asked what measures have been put in place to address the constraints they are encountering during the implementation process of the CTC programme.

a)Findings from nutritionists based at LDHMT

The nutritionist pointed out that preventive based measures are being strengthened and workshops are being conducted for the volunteers and health workers as a way of reducing the

malnutrition cases. One of the nutritionists said that *strengthening community based preventive measures. Conducting orientation workshops for volunteers and health workers.*

b)Findings from health workers

The health workers were also asked what measures had been put into place to address the challenges. It was established that the Lusaka District Health Management Team was usually notified on the constraints that were being experienced at the health centres. In trying to further assist on the shortage of qualified personal of the CTC programme, health talks were given to care givers on foods that are nutritious for the child. It was noted by one health worker that *we have to sensitize also when giving health talk we have to teach mothers how to keep and give good and nutritious foods to their children.* Sensitization of community members on health foods for children was also done in the various growth monitoring points.

4.3.3.2 Summary of Findings from research question three.

This research question unfurled the constraints that were being faced in implementing the CTC programme. The following were the constraints: care givers drop out of the programme because of the various myths about health personnel such as when a child is taken to the hospital they can die. In addition there was failure among some care givers to accept the health status of their children. There was an erratic supply of food supplements (plumpy nut) and cooking ingredients for the cooking demonstrations. Furthermore, health workers attitude towards the care givers was bad. The CTC implementers did not stick to time. It was also revealed that there was a shortage of nutritionist, to implement the CTC programme which led to inconsistence in the delivery of CTC sessions. The CTC sessions also took place once a week which meant that if a caregiver is not available on that particular day the child would not receive the food supplement. Amidst these constraints there were measures that were put in place to address the constraints. Workshops were being conducted to orient health workers and community volunteers. Community based preventive measures were being strengthened. Lastly, Lusaka District Health Management Team received notifications on various issues pertaining to the CTC programme.

4.3.4 Research Question 4: what were the respondents recommended solutions to the constraints that were encountered during the implementation process of the Community-based Therapeutic Care Programme.

The fourth research question was: what were the respondents recommended solutions to the constraints being encountered during the implementation process of the CTC programme? The aforementioned research question was answered by the caregivers, health workers and nutritionists from Lusaka District Health Management Team using open ended questions in a semi structured questionnaire and focus group discussion that brought fourth qualitative responses.

a) Findings from care givers

The following propositions were made by care givers at various health centers. The budgeting for the CTC programme must be adjusted so that the food they are given can increase in terms of variety and quantity. *Since we are only being given a kilogram of herbs or soya beans we would like them to increase kilogram of herbs or soya beans*. One of the interviewees from the health centers said *tingakondeko kuti bakazuti pasako ma eggs, mukaka, orange and banana's* (we would like them to be giving us eggs, milk, oranges and banana's). The government should partner with more organisations so that the programme can improve in terms of delivery. More health workers should be trained so that the CTC sessions are not cancelled. The CTC sessions should be increased from once a week to twice or thrice in a week. One of the respondents from the focus group discussion said*Koma CTC bakazichitko kabili olo katatu mu week osati kamozi* (the CTC programme should be conducted twice or thrice in a week and not once). The relationship between the health workers and the care givers must also improve. Two of the respondents suggested the following:*improving of cordial relationship between us and the health workers. I think these health workers should understand that we do not wish that our childrens health and weight be poor.* In order to ensure that the caregivers have understood what is being taught in terms of the children's welfare, one respondent interestingly made the following statement: *I think the health workers can even introduce something like exams so as to assess how much information one has acquired from the CTC program since they joined.* In addition, *health staff should start having one on one discussions with the mothers help then open up in certain things they could not understand in public.*

b) Findings from LDHMT Nutritionists and Health Workers

The following responses emerged from the health workers and the nutritionists from Lusaka District Management Team. The government should employ more nutritionist given the fact that currently there are no nutritionists in the health centers. One of the health workers had this to say *there are people who have been trained in nutrition with diplomas but they haven't been employed.* They should also be coherence in the delivery of the supplements given to the caregivers. The government should partner with more organisations to help with the implementation process of the CTC programme. The nurses that are available at the health centers should be trained on how to manage the CTC programme so that the CTC sessions can be conducted on a weekly basis even without the nutritionists. Lastly, there should be an increase in the number of health workers that are trained so that replacement of health personnel is made easier.

4.3.4.1 Summary of findings from research question four.

This research question provided answers from the respondents on constraints being faced in the implementation process of the Community-based Therapeutic Care programme. In light of the constraints presented, the government should partner with more organisations to improve the implementation of the CTC programme. The CTC sessions must be conducted more than once a week. There should be an improvement in the way health workers relate with care givers. There should be coherence in the provision of food supplements. Finally, nurses at the health centres must be trained to manage the CTC programme.

4.4. Summary Of Chapter 4

This chapter presented the findings from an analysis of the implementation process of the Community-based Therapeutic Care programme in selected health centers of Lusaka District. In order to analyse the implementation process, information was captured from the Lusaka Health Management Team, Health Workers and Care givers. This information was captured through the use of Focus Group Discussions and semi structured questionnaires. The findings revealed that the CTC programme was formulated after the escalating number of malnutrition cases amongst children below the age of five at the University Teaching Hospital and not as a response to an emergency. The formulation process involved Valid International, Ministry of Health, National

Food and Nutrition Commission. The CTC programme was being implemented by trained health workers and the programme was being monitored. Implementation of the programme was no longer according to the original and intended plan due to lack of nutritionist and the integration of the Infant and Young Child Feeding Counselling. The implementation process had various constraints ranging from inadequate health personal to implement the CTC programme to mothers not attending the CTC programme. Solutions to the constraints were suggested which included, increasing the number of people trained to implement the CTC programme and sensitizing mothers on children's health. The proceeding chapter discusses the findings of the study.

CHAPTER FIVE: DISCUSSION OF THE FINDINGS

5.1. Overview

The discussion Chapter is a segment that brings . . . *together the main research findings…key elements of literature review…* and that *focus on answering the original research problem, comparing the research findings with previous research. Reflections on limitations of the research can also be discussed at this stage, together with recommendations for future research in the area* (David and Sutton, 2004:338). Having presented the major findings in the previous chapter, this chapter serves to discuss the findings. In order to enhance the readability and facilitate understanding, the major results are briefly summerised in each subsection and discussed in relation to the reviewed literature and in the context of the RE AIM framework. The chapter concludes by pointing out the limitations of the study and offering suggestions for future research.

5.2. Research Objective 1: to establish the formulation of the Community-based Therapeutic Care Programme.

Objective 1 sought to establish how the CTC programmed was formulated in Zambia. The study revealed that the CTC programme was formulated after the increase in malnutrition cases at the University Teaching Hospital ward AO7 and not as a response to an emergency. This finding is not in tandem with the formulation process of the CTC programme in other countries. In Zambia the formulation process of this programme was unique in that there was no man made or natural disaster that contributed to the escalating cases of malnutrition unlike in countries like Niger, Ethiopia and Malawi. In these countries, the CTC programme was formulated after natural and man- made disasters such as floods, famine and war (Deconinck, 2008).

The findings suggest that members of the community, who are the primary stakeholders of the programme, did not participate in the formulation process of the CTC programme but instead participated when the programme had already been established and when it was being implemented. On the other hand, it was established that apart from the Ministry of Health, other secondary stakeholders were involved in the formulation process of the aforesaid programme and these included Valid International and National Food and Nutrition Commission. Their participation was through training of health workers and community based volunteers. They also

facilitated the setting up of the CTC programme in the various health centers in Lusaka District. Lastly, they provided the Ready To Use Therapeutic Food commonly known as plumpy nut in the health centers.

The aforementioned findings do not tally with Deconinck (2008) study on Integration of CMAM into National Health Systems which provide answers on how CMAM was integrated in the health systems of Malawi, Ethiopia and Niger.

However, it is important to note that the success of every programme is dependent on the participation of stakeholders from the planning process of a programme to the implementation. The positive part of the Community-based Therapeutic Care programme in Zambia is that it is being implemented even though the care givers did not participate in the formulation process of the CTC programme. However, this finding was not in congruence with the "Effectiveness" dimension of the RE-AIM framework that emphasizes the on value of the involvement of the stakeholders in programme planning phase so that support is generated and consensus is built on what measures will be used, the procedures to be followed as well as sharing control over the implementation as this helps in the reduction of barriers (Feifer, Fifield, Ornstein et al, 2004). In support of this view, Rothwell, Sullivan and Mclean (1995: 177) say that a successful programme must *involve key stakeholders in the planning process.* This is also echoed by Liebenberg and Stewart (1997) who state that, for effective planning to take place, various stakeholders must be incorporated who can contribute their expertise and knowledge to the situation and come up with effective long term objectives for the programme. Even though Braynant and White (1982) intimate that the engagement of stakeholders is likely to bring into being tensions, Rubin (1998) accentuates that successful programmes are based on the stakeholder's knowledge of their roles and responsibilities. Therefore, we can construe that the CTC programme planners did not actually consider all the appropriate precautions needed for the successful formulation of a community programme. The exclusion of stakeholders in the formulation process has the potential to hinder the sustainability of the programme.

5.3. Research Objective 2: to establish the implementation of the CTC Programme.

Objective 2 sought to ascertain how the CTC programme was being implemented. It was revealed from the findings that the CTC programme was not running according to the original and intended plan. It was established that the programme was not being delivered according to the original plan because the nurse who was in charge of the CTC programme had died. One of the health workers said *the changes are there especially after the death of the nurse who was involved in the CTC programme*. It was also discovered that the nurse that had passed away was in charge of the CTC programme at Health Centers A and B, an aspect which negatively affected the delivery of the programme. In justification, one of the health workers said *i say so because there are a few nurses trained. If they were many we were not going to suffer after the death of a nurse who was trained.* This has resulted in the CTC sessions not taking place on a weekly basis as originally planned. This finding was not in tie with Deconinck (2008) study on Integration of CMAM into National Health Systems which provide answers on how CMAM was integrated in the health systems of Malawi, Ethiopia and Niger. This finding was also not in line with Bachmann (2009) who conducted a study on Cost effectiveness of community-based therapeutic care for children with severe acute malnutrition in Zambia: decision tree model.

When a programme is not running according to its original and intended plan, it does not warrant to say that the change that has taken place is negative or positive. It is for this reason that the "Effectiveness" dimension in the RE AIM framework advocates the assessment of both positive and negative impacts that have taken place. In the same vain, this study revealed that the changes made to the CTC programme came not without its merits and demerits in the implementation process of the programme. For instance, the infusion of the Infant and Young Child Feeding Counseling into the CTC programme had positively impacted on the implementation process of the CTC programme in that all the health centers were involved in the screening for malnutrition and the preventive measures have been strengthened by counselling of care givers.

On the other hand, the death of a nutritionists who was in-charge of the CTC programme at two health centres had negatively impacted on its implementation process. Regrettably, the other clinic had no nutritionists. Thus, it can therefore be said that the lack of nutritionists in the health centres had brought about inconsistency in the delivery of the weekly CTC sessions. This seems

to confirm what Conyers and Hills (1990) meant when they elaborated that in an event that there is a change to the implementation of a programme, it is bound to have an effect on the outcome of a programme thereby making it imperative that the implementers of a programme adhere to the implementation strategies that have been put in place .Old et al (2003), echo the above statements by stating that any minor change to the implementation of a social intervention can often make a major difference in the size of the intervention.

It was also established from the findings that the CTC programme does reach the intended people. The intended people are determined through screening which is conducted at the health centres and growth monitoring points. For a programme to be successful it has to have the ability to reach the intended target group. This is in line with what the "Reach" element in the RE-AIM framework emphasises on. This dimension requires that for a programme to be effectively implemented, it has to reach the targeted population it was meant to serve (Belza et al, 2007: 4).

It was also revealed that the health workers that are in charge of the CTC programme were trained in managing the programme. For some individuals, training was done prior to participation in the CTC programme while others were trained after having joined the CTC programme. This therefore, meant that in order for an individual to implement the CTC programme they needed to have the expertise in that area. The programme was being delivered by health workers with the help of community volunteers. This implied that the training that both the health workers and community members went through was not at variance given the different levels of education. This finding agreed with the argument made by Bellg, Borrelli and Resnick (2004) that standardized training can increase the chances of an intervention to be delivered consistently. They further state that despite the stress on standardized training, providers of training should remain adequately individualized; this is in order to account for diverse levels of education and experience. In addition, the providers should be trained multiple times during a programme. Their argument is that it helps the provider maintain their skill and keep them on track. This also tallies with the "Maintenance" dimension of the RE AIM framework which suggests that it is important to use existing personnel if the programme is to remain on course (Planas, 2008).

It was discovered that the CTC programme was monitored on a frequent basis. This meant that the progresses of the activities were watched closely and when a problem occurs it is easily

noticed. The researcher concluded based on the findings that the monitoring of the CTC programme was not effective. This is because if the CTC programme was being monitored correctly and information passed on to the relevant authorities, two of the health centres would not have been sharing a nutritionist. Even after the passing on of this nutritionist, the two health centres would not have been sharing a Nutritionist if this programme was well monitored or they could have been a replacement to make sure that the programme is being delivered consistently. This finding contradicts the Maintenance dimension in the RE AIM framework that indicates that they are several factors that can influence the maintenance of a programme Planas (2008). This is one of the factors that has influenced the CTC programme in a negative manner. For an implementation process to be successful, it is vital that during the formulation process of a programme, a plan on how the programme will be monitored is made. In view of this, Liebenberg and Stewart (1997) aver that the key to the successfully, implementation of every social intervention is inclusion of monitoring to the planning process of a programme as it gives an allowance to various stakeholders to strategies on how best a programme can be monitored. Caffarella (1994) reverberates the same view by stating that planners must ensure that the monitoring approaches that will be used for a programme are outlined up front, this must be in conjunction with planned and unplanned monitoring opportunities. Anything unplanned that emerges must be considered as lessons learnt and can be used when planning other projects. In view of this, Bellg, Borrelli and Resnick (2004) suggest that the following as areas of a programme that must be monitored: the extent of overall intervention implementation process, any changes in intervention implementation during a programme and consistency of intervention delivery among different provider.

It also emerged that respondents shared the view that the CTC programme had the ability to be adopted nationwide. For instance, findings from the document by Muleya (2008: 10) revealed that *…although the Lusaka programme suffers from many of the constraints faced by other CMAM programmes… this approach has proven to be effective and may be transferable to other settings*…. This finding is supported by Hambule (2010) who postulates that the benefit with CTC is that it has the ability to reach communities that are far and the nation at large. In addition Collins et al (2006) avow that the design of this programme was aimed at reducing the cost and also increasing the accessibility for families or individuals that needed to seek medical attention. This therefore means that it can be implemented in any given setting. The Adoption dimension in

the RE AIM framework advocates that a programme must be adoptable or representative in any given environment. The representative aspect of adoption is related to the replicability of an intervention (Glasgow, Magid and Beck et al, 2005).

5.4: Research Question 3: to determine the constraints encountered during the implementation process of CTC.

Objective 3 sought to determine the constraints encountered during the implementation process of CTC. The following were the constraints that were mentioned by the respondents: care givers drop out of the programme because of the various myths about health personnel and also failure to accept the health status of their children. There was an erratic supply of food supplements (plumpy nut) and cooking ingredients for the cooking demonstrations. The health workers attitude towards the care givers was bad. The CTC implementers did not stick to time. It was also revealed that there was a shortage of nutritionists to implement the CTC programme which gave birth to the inconsistence in the delivery of weekly CTC sessions. The CTC sessions also took place once a week which meant that if a caregiver was unavailable on that particular day the child would not receive the food supplement. The quantity and variety of food supplements was limited.

The aforementioned constraints are in line with some of the constraints outlined in Deconinck's (2008) study on Integration of CMAM into National Health Systems which provide answers on how CMAM was integrated in the health systems of Malawi, Ethiopia and Niger. He listed the following as constraints: "Health infrastructure undermined by lack of qualified health staff and high staff turn-over. Need for financial resource commitment to support CMAM at all levels, including supplies. Supply interruptions negatively affected programming. Lack of standardised protocol and weak monitoring and reporting systems. Issues of community access, e.g., distance from health facilities, preference of traditional care system. Poor understanding of malnutrition at the community level (i.e. not perceived as a medical or dietary problem)." The findings from Deconinck are an indication that the constraints encountered during the implementation process of the CTC programme are somewhat similar regardless of the country as can be seen from the findings in Zambia and those that were found in Malawi, Ethiopia and Niger. Habulembe (2010) conducted a study on performance evaluation of eleven severe acute malnutrition community based outpatient therapeutic care centers in Lusaka District of Zambia. This study also highlights

the following constraints: food supplies in terms of RUTF seemed to be inadequate. Ration cards were inadequate. Height boards were scarce commodities. It is most likely this was the reason why most health facilities were not taking heights of children. Logistics seems to be inadequate in all health facilities (vehicles). From Habulembe's findings it can be deduced that the major constraint of the CTC programme in Zambia was the inadequate supplies of Ready To Use Therapeutic Food. These findings sharply contradict with what the "Implementation" dimension of the RE-AIM framework suggests. This dimension aims at assessing the adherent and delivery component of a programme (Planas, 2008). The constraints faced during the implementation process have contributed to the way the CTC programme is being delivered as well as its adherence to the original plan.

Another constraint that was unearthed was the inconsistence in the supply of the food supplement could therefore, mean that the children's nutritional status would be affected thereby negatively impacting on the implementation process. The inconsistence in the weekly CTC sessions also has an impact on the outcome of the CTC programme. This is supported by Valid (2006) who emphasise that the foundation of understanding for the CTC programme is that quick access to nutritional care and consistency in the nutritional programme can lead to success rates and the impact can be high. In an event that a child does not access nutritional care and there is no consistency in attending the programme, the impact will be minimal.

The Community-based Therapeutic Care programme did not have skilled nutritionists. Despite not having nutritionists, the CTC programme still took place though inconsistently. But for a programme to be successful it is a requirement that you have skilled personnel or people with the expertise otherwise changes would be made to the programme in trying to sustain it which also has an impact on the programme. This is supported by Fullan, Cuttress, and Kilcher (2005) who affirm that one of the most decisive elements that affect the success of the programme is the unavailability of skilled support to manage a programme. It is for this reason that Bellg, Borrelli and Resnick (2004) postulate that it is advantageous to train extra providers beyond those initially needed, this therefore means that the replacement of an expert or skilled person will be easy considering that many will have the expertise. In addition, this can reduce the rushed training of individuals for the purpose of replacement.

With regards to time, it was discovered that the CTC implementers did not stick to time. This could have a negative impact on the implementation of the CTC programme because the programme was intended to serve the care givers at a given time taking into account their various responsibilities. In order to capture as many care givers as possible it was imperative that the health workers start the CTC sessions on time so that the daily routines of the care givers does not get disturbed. In stressing the time factor, WHO (1995) stipulates that time is of essence in the implementation of a health programme in that the results of a programme can take months or years for the benefits to be considered perceptible. This contradicts Victoria's et al (2003) claim that the Community-based Therapeutic Care programmes were designed in such a way that they attempted to take into account the workloads that the women had to attend to and also the factors that contribute to the late presentation of acute malnutrition and other conditions to health centers.

The study also established that the care givers dropped out of the programme because of the various myths about health personnel and also due to failure to accept the health status of their children. It also emerged that care givers (guardians of malnourished children) had unique challenges that they were facing. Most of them complained that the food which they were given was limited to only plumpy nut and that this plumpy nut was not always available. The health workers attitude towards the care givers is bad. These challenges can be used as lessons and can be included in the training of CTC implementers so that the programme improves. As Bellg, Borrelli and Resnick (2004) intimate, the challenging patient cases, questions, and problems that providers have identified can also be used during training sessions.

Although the CTC programme had various constraints, the respondents indicated that certain measures had been put in place to try and alleviate the constraints. Workshops were being conducted to orient health workers and community volunteers on CTC implementation. In addition, Community Based Preventive measures were being strengthened. Lastly, Lusaka District Health Management Team receives notifications on various issues pertaining to the CTC programme.

5.5 Research Objective 4: to establish respondents recommended solutions to the constraints that were encountered during the implementation process of the Community-based Therapeutic Care Programme.

Objective 4 revealed respondents suggested solutions to the constraints they were encountering during the implementation of the Community-based Therapeutic Care Programme. Based on these constraints, respondents suggested the following:

a) The respondents agreed that the quantity of food that they were given during the CTC sessions was not adequate. Thus, they suggested that the Ministry of Health should increase the variety and quantity of food supplement. They further recommended that in addition to the food supplement that they were given, they can also be given fruits and other foods that would provide nutrients that the children need.

b) The respondents shared the view that the government, through the Ministry of Community Development Mother and Child Health as well as the Ministry of Health, should partner with more organisations seeing that the few organisations that are involved in the CTC programme come with various benefits such as providing food for cooking demonstrations which provide the caregivers with the knowledge on how best to prepare nutritious foods.

c) The respondents granted that the provision of the CTC once a week was not adequate because if they had a commitment on that day when the sessions are provided it therefore meant that the child would not receive food supplements for that week. As such, they saw it appropriate that the CTC sessions must be conducted more than once a week.

d) The care givers stated that there should be an improvement in the way health workers related with them. This emerged from the fact that care givers perceived health workers to have had a bad attitude towards them.

e) The respondents were of the view that the inconsistence in the provision of the food supplements was not helpful to their children, a situation they perceived as unmatched with the original plan of the CTC programme. However, the crux of the CTC sessions is to help improve the nutritional status of a child. Hence, they suggested that the Ministry of Community Development Mother and Child Health must ensure that the food supplements are available all the time.

f) The respondents saw it fit that all the Nurses in the health centres must be trained in the management of the CTC programme. They attributed this argument to the fact that if all the nurses were trained in the management of the CTC programme, it would mean that there would be continuation of the programme in an event that the person who was responsible was not available. Alternatively, the respondents recommended that the Ministry of Community Development Mother and Child Health must employ more nutritionists seeing that they were no nutritionist to implement the programme.

g) The respondents made mention that they had other responsibilities aside from taking their children for CTC. Therefore, they suggested that the CTC sessions must be started on time.

5.6 Limitations of the study

The RE-AIM framework that was used for this study has 5 dimensions namely, Reach, Effectiveness, Adoption, Implementation and Maintenance. It has not yet been determined how these elements combined to affect the impact of public health. This framework was used because it helps a programme planner and an evaluator understand a broad array of issues pertaining to the implementation of a health programme.

Lastly, the selected health centres did not have nutritionists. This meant that the researcher could not get the views of the nutritionist who are trained to implement the Community-based Therapeutic Care programme at the health centres. All the three (3) Nutritionists sampled for this study were all from LDHMT and not from the 3 selected health centres as should have been the case if the original plan for the CTC programme was followed.

5.7 Suggestions for future research

Based on the findings from this study as well as the discussion. The following are some of the studies that can be conducted.

a) Instructional techniques used in training community volunteers.
b) Communication strategies used by health workers during the under-five clinic.

5.8 Summary of chapter

This chapter provided a discussion on the implementation process of the Community-based Therapeutic Care programme. This was done by reviewing various literature on the CTC programme. The RE-AIM framework which guided the study was used in the discussion. The limitations of the study were highlighted and suggestions for future research were made.

The proceeding chapter will therefore provide a conclusion of the study and recommendations will be given

CHAPTER SIX: CONCLUSION AND RECOMMENDATION

6.1 Overview

The previous chapter provided a discussion on the implementation process of the Community-based Therapeutic Care programme in Lusaka District. This was done with the help of the four objectives, related studies and literature pertaining to the Community-based Therapeutic Care programme and the RE AIM framework. The present chapter will therefore provide a conclusion of the study based on the objectives and will also provide recommendations based on the findings of the study.

6.2 Conclusion

The aim of this study was to analyse the implementation process of the Community-based Therapeutic Care Programme. The objectives of this study were to: i) establish how the CTC programme was formulated; ii) establish how CTC was being implemented; iii) determine the constraints encountered during the implementation process of CTC; and iv) establish respondents recommended solutions to the constraints that were encountered during the implementation process of the Community-based Therapeutic Care Programme. The study was conducted in three health centres namely Chaisa, Garden and Mandevu. The sample size was 135 which comprised of 3 Nutritionists from Lusaka District Health Management Team, 23 Health Workers and 109 Care givers.

As stated in the foregoing paragraph the first objective of the study was to establish how the CTC programme was formulated. The formulation of the Community-based Therapeutic Care programme in Zambia was different from Ethiopia, Niger and Malawi in that it was not as a result of man-made or natural disasters such as wars, famine, floods and drought. Instead the programme was formulated after escalating cases of malnutrition in children below the age of five at the University Teaching Hospital ward AO7 in Lusaka District. The increase in malnutrition cases at the University Teaching Hospital was as a result of not having adequate district hospitals.

Objective one also established that Valid International, Ministry of Health, National Food and Nutrition Commission were the stakeholders that participated in the formulation of the CTC

programme in Zambia. The participation of stakeholders in the formulation of the programme was vital in that they each had a role to play in the programme that helped in the attainment of the goals. These stakeholders participated through the provision of Ready to Use Therapeutic Food, the training of both health workers and community volunteers and lastly the setting up of the CTC programme in various health centres. It was also revealed that the CTC programme has the ability to be adopted nationwide because it involves the community and incorporates community based activities. Based on the first objective, it can therefore be concluded that the formulation process of the CTC programme in Zambia was as a result of the escalating malnutrition cases at the University Teaching Hospital which was as a result of lack of district hospitals to attend to the malnutrition cases. Furthermore the formulation process of the CTC programme in Zambia differed from what was conducted in countries like Ethiopia and Niger because it was not as a result of a man made or natural disaster but it was as result of the escalating malnutrition cases at the University Teaching Hospital.

The second objective sought to establish how the CTC programme was being was being implemented. The Community-based Therapeutic Care programme was not being implemented according to the original and intended plan. This had been as a result of not having nutritionists in the health centers to implement the CTC programme on a weekly basis. Consequently, the CTC sessions were sometimes conducted by the community volunteers.

Objective two further established that there was an integration of a component called Infant and Young Child Feeding Counselling which had helped strengthen malnutrition preventive measures among care givers. Even though the CTC programme was not being implemented according to the original plan, it reached the intended individuals who were children below the age of five who were malnourished but without medical complications. These children were admitted to the programme upon being screened at the health centres and Growth Monitoring Points. Elizabeth Glaser Pediatric ADIS Foundation, Chesire, Mandevu Catholic and Women's Federation were the organisations that participated in the implementation of CTC programme. Their participation was through the provision of food supplements, provision of cooking ingredients for the cooking demonstrations and also monitoring of the CTC programme. The health workers that participated in the implementation of this programme were trained. This training was done prior to participation in the CTC programme and at times it was done after a

health worker joined the CTC programme. The programme was monitored. Based on the second objective which was to establish how the CTC programme was being implemented, it can therefore be said that the Community-based Therapeutic Care programme is not being implemented according to the original and intended plan. This was because there were no nutritionist to implement the CTC programme in the health centres which resulted in the inconsistency of weekly CTC sessions. Additionally, the integration of the Infant and Young Child Feeding Counselling had impacted on the CTC programme positively in that malnutrition preventive measures had been strengthened in the community.

The third objective sought to determine the constraints encountered during the implementation process of the Community-based Therapeutic Care Programme. It was established that the CTC programme faced various constraints in its implementation process. Prominent among them were that : i) the health centres did not have nutritionists to implement the CTC programme; ii) the provision of the supplementary food was not consistent; iii) some care givers dropped out of the programme due to various myths about health personnel and failure to accept the health status of their children; iv) the health workers attitude towards the care givers was bad; v) the CTC implementers did not stick to time; vi) the CTC sessions also took place once a week which meant that if a caregiver was not available on that particular day the child would not receive the food supplement. vii) the quantity and variety of food supplements was limited.

Based on the forgoing challenges, respondents stated the following as measures that had been put in place: workshops were being conducted to orient health workers and community volunteers on how the CTC programme was to be implemented. Community based preventive measures were being strengthened to try and reduce the number of malnutrition cases among children in Zambia. Lastly, Lusaka District Health Management Team was notified of various issues pertaining to the CTC programme. Based on the third objective which was to determine the constraints encountered during the implementation process of the CTC programme, it was revealed that the CTC programme had various constraints in implementing the CTC programme and some measures had been put in place to resolve the constraints. If the CTC programme was to be successful in its implementation process, the aforementioned constraints had to be addressed immediately. This is due to the fact that the implementation process was anchored on

the availability of trained nutritionists, availability of food supplements, time keeping, presence of care givers and a healthy relationship between care givers and health workers.

The fourth objective was to establish respondents' proposed solutions to the constraints being encountered during the implementation process of the Community-based Therapeutic Care Programme. The respondents provided the following as solutions to the constraints they faced during the implementation process of the CTC programme: there should be an increase in the variety and quantity of food supplement. The government should partner with more organisations to improve in the implementation of the CTC programme. The CTC sessions must be conducted more than once a week. There should be an improvement in the way health workers relate with care givers. There should be coherence in the provision of food supplements. Nurses at the health centres must be trained to manage the CTC programme. Based on the last objective which was: respondents suggested possible solutions to the constraints being encountered during the implementation process of the Community-based Therapeutic Care Programme, the above mentioned were the solutions that were provided by the respondents as possible solutions to the constraints they had encountered in the implementation process of the CTC programme. In order to improve the implementation process of the CTC programme the solutions that were provided by the respondents must be taken into account seeing that they are the stakeholders who are directly involved in the implementation process and therefore stand a better chance of providing useful information pertaining to the programme.

Based on the forgoing, it can be deduced that that the Community-based Therapeutic Care Programme was not being implemented according to the original plan. This was due to inadequate health workers which had a negative impact on the delivery of the programme. On the other hand, the inclusion of the Infant and Young Child Feeding Counseling positively influenced the implementation process despite it not having been part of the original plan.

6.3. Recommendations

The following recommendations emanated from the findings and discussion of the study.

a) The Ministry of Community Development Mother and Child Health (MCDMCH) must incorporate a component of Adult Education principles in the curriculum of health workers seeing that they handle adults during the CTC programme.

b) The MCDMCH must employ more than one nutritionist at a health centre.
c) The MCDMCH must also ensure that the food supplements are delivered on time to enable coherence in the delivery of the CTC sessions.
d) The Sisters-In Charge of the various health centres must ensure that the CTC sessions begin on time.
e) The Ministry of Community Development Mother and Child Health must come up with a policy which will give an allowance for the health centres to conduct CTC sessions more than once in a week.
f) The Lusaka District Health Management Team must ensure that the reports that are given concerning the challenges being face by the health workers are addressed as soon as possible if the CTC programme is to improve the nutritional status of the children.
g) The MCDMCH together with the Lusaka District Health Management Team should design a follow up programme for the care givers who drop out from the CTC programme.

6.4 Summary of the Chapter

Chapter six presented the conclusion and recommendations for the study. The conclusions were drawn from the research objectives of the study. The recommendations were based on the findings and discussion of the study.

References

Adejimi, A., Oyedirian, O.S., and Ogunsanmi, E. B. (2010). "Employing Qualitatively Enriched Semi Structured Questionnaires in Evaluating ICT Impact on Nigerian Construction Chain Intergration" .*The Built & Human Environment Review, Vol.* 3 (1): 49-50.

Ary, D., Jacobs, L., and Razzvich, A. (1996). *Introduction to Research Education*. FortWorth: Harcout Brace.

Babikir, H. E., Ali, B. A., and Mabuo, M. A. (n.d).*"*Research Methodology Step By Step Guide For Graduate Students."Sudanese Journal of Paediatricians, Vol. 9 : 9-22

Bachmann, O. M. (2009*).Cost Effectiveness of Community-Based Therapeutic Care for Children with Severe Acute Malnutrition in Zambia: Decision Tree Model*. Retrieved fromhttp://www.resource-allocation.com/content/7/1/2 5th July 2014 11: 45.

Bellg, A.J, Borrelli. B., Resnick, B. et al. (2004). "Enhancing Treatment Fidelity in Health Behavior Change Studies: Best Practices and Recommendations from the NIH Behavior Change Consortium". *Health Psychology, Vol.*23:443-51.

Belza, B., Toobert, D.J., and Glawsgow, R.E. (2007).*RE-AIM for Programme Planning: Overview and Applications.* Washington, DC: National Council on Aging/Center for Healthy Aging.

Besculides, M., Zaveri, H., Farris, R., and Will, J. (2006). "Identifying Best Practices for WISEWOMAN Programme Using a Mixed-Methods Evaluation."*Preventing Chronic Disease, Vol.* 3: 133. Available at *www.cdc.gov/pcd/issues/2006/jan/05_0133.htm .*

Beri, G.C. (2007). *Marketing Research* (4thed.). New Delhi: Tata McGraw-Hill Publishing Company Limited.

Bhattacherjee, A. (2012). *Social Science Research: Principles Methods and Practices* (2nd ed.). Florida: Creative Commons Attribution-Non Commercial- Share Alike.

Boote, D.N. and Beile, P. (2005). "Scholars Before Researchers: On the Centrality of the Dissertation Literature Review in Research Preparation". *Educational Researcher,Vol.*34(6): 3-15.

Braveman, P. A., and Egerter, S. (2008). *Overcoming Obstacles in Health Affairs*. Princeton, NJ: Robert Wood Johnson Foundation.

Bryant, C. and White, L.G. (1982).*Managing development in the Third World.* Colorado: Westview Press.

Bryman, A. (2004). *Social Research Methods.* Oxford: Oxford University Press.

Burns, S.N., and Grove, S.K. (2003). *Understanding Nursing Research* (3rd ed.). Philadelphia: Saunders.

Bwalya, B. B. (2013). *Influence Of Maternal Characteristics On Under Five Nutritional Status In Zambia.*A Dissertation submitted to the University of Zambia in Partial fulfillment of the requirements of the degree of Master of Arts in Population Studies.

Caffarella, R. S. (1994*). Planning Programmes for Adult Learners: A Practical Guide for Educators, Trainers and Staff Developers*. San Francisco: Jossey Bass.

Caffarella, R. S. (1998-1999). "Planning Programmes for Adults". *Adult learning, Vol.* 10 (2):27-29.

Caffarella, R. S. (2002). *Planning Programmes for Adult Learners: A Practical Guide for Educators, Trainers, and Staff Developers* (2nd Ed.). San Francisco: Jossey-Bass.

Calabrese, L.R. (2009). *The Dissertation Desk Reference: The Doctoral Students Manual to Writing the Dissertation.*Maryland : Rowman Littlefield Publishing Group Inc.

Calmorin, P.L., and Calmorin, M.A. (2007). *Research Methods and Thesis Writing* (2nd ed.). Manila: Rex Bookstore

Cargan, L. (2007). *Doing Social Research.* Maryland: Rowman & littlefield Publishers Inc.

Cottrell, R. R., and Mckenzie, F.J. (2011).*Health Promotions and Education Research Methods: Using the Five Chapter Dissertation Model.*Canada: Jones and Bartlet Publishers.

Chilele, C. M. (2004). *Communication Strategies Used in Combating and Preventing Malnutrition: A Case Study of the Maternal and Child Clinic at Chinama Hills Hospital, Lusaka* A dissertation submitted to the University of Zambia in partial fulfillment of the requirements for the award of the Degree of Master of Communication for Development.

Cohen, L., and Manion, L. (1994). Research Methods in Education (4th ed.). London: Routledge

Cohen, S. (1996). *Research to Improve Implementation and Effectiveness of School Health Programmes*. Geneva: World Health Organization.

Collins, S. (2004). *Community Based Therapeutic Care: A New Paradigm for Selective Feeding in Nutritional Crisis.* HPN Network Paper, Number 48.

Collins, S. (2001).*Changing The Way We Address Severe Malnutrition During Famine*. Retrieved from www.thelancet.com23rd July 2014, 10:30hrs

Collins, S., Dent, N., Binns, P., Bahwere, P., Sadler, K., and Hallam, A. (2006). *Management of Severe Acute Malnutrition in Children*. Retrieved from www.thelancet.com23rd July 2014, 10:35hrs.

Collins, S., and Sadler, K. (2002). "Outpatient Care for Severely Malnourished Children in Emergency Relief Programmes: A Retrospective Cohort Study". *The Lancet, Vol. 360*: 1824-30.

Conyers, D., and Hills, P. (1990*).An Introduction to Development Planning in Third World*. New York: John Wiley & Sons.

Creswell, J. W. (2003). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (2nd ed.). Thousand Oaks: Sage Publications.

Creswell, J. W. (2009). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (3rd ed.).New Dehli: Sage Publications.

Currie, C et al., (eds.). (2012). *Social determinants of health and well-being among young people. Health Behaviour in School-aged Children (HBSC) study: international report from the 2009/2010 survey*. Copenhagen: WHO Regional Office for Europe.

David, M., and Sutton, D. C. (2004). *Social Research: The Basic.* California: Sage Publications.

Deconinck, H. (2008). *Integration of CMAM into National Health Systems.* International Workshop on the Integration of Community – Based Management of Acute Malnutrition held in Washington DC, April 28 –30. Workshop Report.

Delicath, A. T., and Buckley, R. (2013). *Dissertation and Research Success.* Missouri: Xlibris Cooperation.

Durlak, J. A., and Dupre, E. P. (2008). "Implementation Matters: A Review of Research on the Influence of Implementation on Programme Outcomes and the Factors Affecting Implementation". *American Journal of Community Psychology, Vol.*41 (3): 327–350.

Evaluation Research Team. (2009). *Evaluation Briefs*. Retrieved from http://www.cdc.gov/healthyyouth/evaluation/index.htmUTH. 30th December 2014 11:35

Ezzati M, Vander Hoorn S, Rodgers A, Lopez AD, Mathers CD, Murray CJL et al. (2003). "Estimates of global and regional potential health gains from reducing multiple major risk factors."*Lancet, Vol362* (2003):271–280.

FAO. (2005). "*Hunger Slows Progress towards Millenium Development Goals(MDGs)*".http://www.fao.org/newsroom/en/news/2005/1000151/index.html [Accessed 26 May, 2011].

Farmer, T., Robinson, K., Elliot, S.J., and Eyles, J. (2006)."Developing and Implementing a Triangulation Protocol for Qualitative Health Research". *Qualitative Health Research, Vol.*16 (2006): 377-394.

Farrell, P. (2011). Writing a Built Environment Dissertation: Practical Guidance and Examples. Oxford: Wiley-Blackwell.

Feifer, C. Fifield, J. Ornstein, S. et al. (2004). "From Research to Daily Clinical Practice*": What Are the Challenges in Translation*?*Vol*. 30 (2004):235-45.

Foss, K.S., and Waters, W. (2007). *Destination Dissertation: A Traveler's Guide to a Done Dissertation*. Maryland: Rowman and Littlefield Inc.

Fullan, M., Cuttress, C., and Kilcher, A. (2005). "Eight Forces For Leaders of Change: Presence of the Core Concepts Does Not Guarantee Success, But Their Absence Ensures Failure*"*. *Journal of Staff Development, Vol.* 26(5): 54–58.

Fraenkel, J. and Wallen, N. (1993). *How to Design and Evaluate Research in Education* (2nd ed.). New York: McGraw-Hill Inc.

Glasgow, R. E., Vogt, T. M., & Boles, S. M. (1999). "Evaluating the Public Health Impact of Health Promotion Interventions: The RE-AIM Framework". *American Journal of Public Health, Vol*. 89 (1999): 1322-7.

Glasgow, R. E., Klesges, L. M., Dzewaltowski, D. A., Bull, S. S., and Estabrooks, P. (2004). "The Future of Health Behavior Change Research: What is Needed to Improve Translation of Research Into Health Promotion Practice?"*Annals of Behavioral Medicine, Vol.* 27 (2004): 3-12.

Glasgow, R.E., Magid, D.J., Beck, A. et al. (2005). "Practical Clinical Trials for Translating Research to Practice: Design and Measurement Recommendations".*Med Care, Vol*. 43 (2005):551-7.

Goma, C. A. (2013). *Determining The Point Prevalence Of Malnutrition In Children Aged Between Two Years And Below In Two Urban Zonal Health Centres In Lusaka*. A dissertation submitted to the University of Zambia in partial fulfillment of the requirements for the award of the Masters Degree of Public Health.

Gosh, B.N. (1992). *Scientific Method and Social Research.* New Delhi: Sterling Publishers Private Limited.

Gupta, K. (1999). *A Practical Guide to Needs Assessment*. San Francisco: Jossey- Bass.

Green, L. W., and Glasgow, R. E. (2006). "Evaluating the Relevance, Generalization, and Applicability of Research: Issues in Translation Methodology".*Evaluation and the Health Professions*, Vol 29. (2006): 126-53.

Gratton, C. and Jones, I. (2010). *Research Methods for Sports Studies* (2nd ed.). New York: Taylor& Francis.

Hair, F. J., and Celsi, M. W. (2011). *Essentials of Business Research Methods* (2nd ed.). New York: ME Sharper, INC

Hamulembe, R. (2010). *Performance Evaluation Of Eleven Severe Acute Malnutrition Community Based Outpatient Therapeutic Care Centres In Lusaka District.* A dissertation submitted to the University of Zambia in partial fulfillment of the requirements for the award of the Degree of Master of Public Health.

Heppner, P.P., and Heppner, M.J. (2004).*Writing and Publishing your Thesis, Dissertation and Research: A Guide for Students in the helping Professions.* California: Brooks/Cole-ThomsonLearning.

Holcomb, E.J., and Andrew, S. (2005). "Triangulation as a Method for Contemporary Nursing Research". *Nurse Researcher, Vol.* 13 (2005): 71-82.Kish, L. (1965). *Survey Sampling.* New York: John Wiley and Sons.

Isreal, M., and Hay, I. (2006). Research Ethics for Social Scientists. London: Sage Publications

Kingry, M.J., Tiedje, L.B., and Friedman, L. (1990). "Focus Groups: A Research Technique for Nursing*".Nursing Research***,** Vol 39 (1990): 124-125.

Kish, L. (1965). Survey Sampling. New York: John Wiley and Sons.

Koh, E. T., and Owen, L. W. (2000). *Introduction to Nutrition and Health Research*. Norwell, MA :Kluwear Academic Publishers.

Kombo, D. K., and Tromp, D.L.A. (2006). *Proposal and Thesis Writing: An Introduction*. Kenya: Paulines Publications Africa

Kothari, C.R. (2004). *Research Methodology: Methods and Techniques* (2nd ed). New Delhi: New Age International.

Kumar, R. (1999). *Research Methodology: A Step by Step Guide for Beginners.* Thousand Oaks, CA: Sage Publications

Lisbenberg, S., and Stewart, P. (1997). *Participatory development management and the RDP*. Kenwyn: Juta & Co, ltd.

Loue, S. (1999). *Gender Ethnicity and Health Research.* New York: Taylor & Francis.

Lövgren, G., Åström, G., and Engström, B. (2001). "A Care Policy and Its Implementation." *International Journal of Nursing Practice*, Vol. 7 (2001): 92–103.

McMillan, J. H., and Schumacher, S. (2001). *Research in Education: A Conceptual Introduction* (5th ed.). New York: Longman.

Merriam, S.B. (1997). *The Profession and Practice of Adult Education: An Introduction*. San Francisco: Jossey-Bass.

Merriam, S., and Simpson, E. L. (1995). *A Guide to Research for Educators and Trainers of Adults* (2nd ed.). Malabar, FL: Krieger Publishing Company.

Merriam, S. B. (2002). *Introduction to Qualitative Research.* San Francisco: Jossey Bass.

Merriam, S. B. (1988). *Case Study Research in Education: A Qualitative Approach.* San Francisco: Jossey- Bass Publishers.

Merriam, S.B., and Simpson, E.L. (1984). *A Guide to Research for Education Trainers of Adult* (2nd ed.). Malabar: Kruger Publishing Company.

Molenda, M., Persheng, P., and Reigluth, C. (1996). "Designing Instructional Systems." In R. L. Craig (Ed.). (1996). *The ASTD Training and Development Hand Book* (4th ed.). New York: McGraw-Hill, pp.: 266-293.

Moore, D.S., and McCabe, G. P. (1989). *Introduction to the Practice of Statistics*. New York: Freeman and Company.

Muleya, M. C. (2008).Case Study: Integration in Urban Health Services. International Workshop on the Integration of Community – Based Management of Acute Malnutrition held in Washington DC, April 28 –30. Workshop Report.

Olds, D. et al. (2003). "Taking Preventive Intervention to Scale: The Nurse-Family Partnership". *Cognitive and Behavioral Practice, Vol.* 10, 278-290.

Patton, M.Q. (1990). *Qualitative Evaluation and Research Methods.* California: Sage Publication

Pelletier, D.L., Frongillo, E.A., Schroeder, D.G., and Habicht, J.P. (1994). "A methodology for estimating the contribution of malnutrition to child mortality in developing countries."*Journal of Nutrition, Vol. 124*(10):210−2122.

Parahoo, K. (1997). *Nursing Research Principles, Process and Issue's.* London: Macmillan.

Planas, L.G. (2008) "Intervention Design, Implementation and Evaluation". *Am J Health System Pharm, Vol.* 65 (2008): 1854-63

Punch, K.F. (2005). *Introduction to Social Research: Quantitative and Qualitative Approaches* (2nd ed.). London: Sage.

Remenyi, D., Williams, B., Money, A., and Swartz, E. (1998). *Doing Research in Business and Management.* London: Sage Publications.

Rodger, A. (1992). *Adults Learning for Development*. London: Casell Education ltd.

Rothwell, W. J., Sullian, R., and Mclean, G.N. (1995). *Practising Organisation Development: A Guide for Consultants*. California: Pfeiffer & Company.

Rubin, F. (1998).*ABasic Guide to Evaluation for Development Workers*. Oxford: Oxfam.

Smith, B., Tang, K.C., and Nutbeam, D. (2006). "WHO Health Promotion Glossary, New Terms".*Health Promotion International, Vol.*21(4):340–5.

Sim, J., and Wright, C. (2000). *Research in Health Care: Concepts, Design & Method.* London: Nelson Thrones.

Singleton, R. (1988). *Approaches to Social Research.* Oxford: Oxford University Press.

Singh, Y. K. (2006). *Fundamentals of Research Methodology and Statistics*. New Delhi: New Age International.

Speziale, H.J., and Carpenter, D. R. (2007). *Qualitative Research in Nursing: Advancing the Humanistic Imperative*(4th ed). Philadelphia, PA: Lippincott, Williams Wilkins.

Tekeste, A., Wonda,M., Girma, F., and Deribe, F.(2012). *Cost Effectiveness and Resource Allocation*. Retrieved from: http://www.resource-allocation.com/content/10/1/410:4

UNICEF, (2013). *Improving Child Nutrition: The Achievable Imperative for Global Progress.*UNICEF

UNICEF, (2008). *UNICEF Humanitarian Action Zambia Country Chapter* **.**UNICEF.

Valid International. (2006). *Community-Based Therapeutic Care – A Field Manual*. Oxford: Valid International.
Valid International Zambia. (2007). *Data Set.* Valid International.

Vella, J. (1994). *Learning to Listen, Learning To Teach: The Power of Dialogue In Educating Adults*. San Francisco: Jossey-Bass Publishers.

Victora, C.G., Wagstaff, A., Schellenberg, J.A., Gwatkin, D., Claeson, M., and Habicht, J.P. (2003). "Applying an Equity Lens to Child Health and Mortality: More of the Same Is Not Enough". *Lancet, Vol.*362(9379):233-241.

Vince, W. C. (2005). "Implementing Research-Based Health Promotion Programmes in Schools: Strategies for Capacity Building."In B. B. Jensen & S. Clift, (Eds.). (2005).*The Health Promoting School: International Advances in Theory, Evaluation and Practice.* Copenhagen: Danish University of Education Press, pp. :107-135.

WBI Evaluation Group. (2007). Document Review. Retrieved from

http://siteresources.worldbank.org/WBI/Resources/213798-1194538727144/11Final-Document_Review.pdf12th June 2014 10:40 hrs.

Wellington, J. (2000). *Educational Research.* London: Continum

Werner, A. (2004). *A Guide to Implementation Research*. Washington DC: The Urban Institute Press.

World Health Organization. (1997). *Promoting health through schools*. Report of a WHO Expert Committee on Comprehensive School Health Education and Promotion, WHO Technical Report Series, No. 870. Geneva: WHO.

WHO/UNHCR/IFRC/WFP. (2000). *The Management of Nutrition in Major Emergencies*. Geneva: World Health Organization.

WHO. (1995). *Physical Status: The Use and Interpretation of Anthropometry – Report of a WHO Expert Committee. Technical Report Series 854*.Geneva: World Health Organization.

WHO. (2007). *Severe Acute Malnutrition*. Geneva: World Health Organisation.

APPENDICES

Appendix 1: Questionnaire for Health Workers

I am a student at the University of Zambia currently perusing a Master of Education in Adult Education. I am conducting a research on the implementation of the Community-based Therapeutic Care programme. I intend to collect data which will be used to address various issues that have been raised in my dissertation. To this extent I shall be most thankful if you would participate in my research by answering the questionnaire. Please note that the information gather will be solely used for academic purposes.

Instruction

a). Please don't write your name on the questionnaire.

b). Kindly answer all questions by ticking [√] in the box provided or writing in the space provided.

c). Feel free to respond to the questions as the information obtained will be treated with strict confidentiality. Your response will be highly appreciated

Section A

1.Sex

(a) Male [ ] (b) Female [ ]

Section B

2. What is the name of your health center?

……

3. How do the care givers (community members) get selected to be part of the CTC programme?

……
……
……

4. Have the people managing the CTC programme been trained on how to run it.

……

If yes answer question 5 to 7

5. When did they undergo the training?

……

6. Who conducted the training?

……

7. Do you think the training they received was helpful to the role they play in the CTC programme?

……

……

8. In your opinion is the CTC programme targeting the intended people?

a) Yes [ ] (b) No [ ]

Please justify your answer.

……

……

……..

9. Is the programme being delivered according to the original plan?

a) Yes [ ] (b) No [ ]

If your answer is no answer questions 10 and 11.

10. Why is the programme not being implemented as originally planned?

……

……

……..

11. What changes have been made to the programme?

……

……

……

12. Are there any organisations that are involved in the implementation of the CTC programme?

(a) Yes [ ] (b) No [ ]

If yes answer questions 13 to 14.

13. What are the names of the organisations?

……
……

14. How do these organisations participate in the CTC programme?

…..……
……
……

15. Is the CTC programme monitored?

……

If yes please answer questions 16 and 17. If no answer question 18

16. Who monitors it?

……
…….

17. How often is it monitored?

……
……

18. Why is the programme not monitored?

……
……
……

Section C

19. Are there any challenges being faced in the implementation of the CTC programme?

(a)Yes [ ] (a) No [ ]

If your answer is yes, please state the challenges and answer question 21

……

……

……

21. What measures have been put in place to address the challenges?

……

……

The End

Thank you for taking the time to answer my questionnaire. Should you wish to contact me, below are my contact details. Nyondwa Zulu (0979 476983)

Appendix 2: Questionnaire for Nutritionists at LDHMT

I am a student at the University of Zambia currently perusing a Master of Education in Adult Education. I am conducting a research on the implementation of the Community-based Therapeutic Care programme. I intend to collect data which will be used to address various issues that have been raised in my dissertation. To this extent I shall be most thankful if you would participate in my research by answering the questionnaire. Please note that the information gather will be solely used for academic purposes.

Instructions

a). Please don't write your name on the questionnaire.

b). Kindly answer all questions by ticking [√] in the box provided or writing in the space provided.

c). Feel free to respond to the questions as the information obtained will be treated with strict confidentiality. Your response will be highly appreciated

Section A

1.Sex

(a) Male [ ] (b) Female [}

Section B

2. How was the Community-based Therapeutic Care Programme formulated?

……
……
……
……

3. Did the community members participate in the formulation of the Community-based Therapeutic Community programme?

……

If your answer is no, state the reason and if your answer is yes answer question 4.

……
……
……

4. How did the community members participate in the formulation of the CTC programme?

……
……
……
……

5. Are there any stakeholders that were involved in the formulation of the CTC programme?

……

If your answer is yes, list the stakeholders involved

……
……
……
……
……
……

6. In what way did the other stakeholders participate in the formulation of the program?

……
……
……

Section C

7. How do the care givers (community members) get selected to be part of the CTC programme?

……
……
……

8. Have the people managing the CTC programme been trained on how to run it.

……

If yes answer question 9 to 11

9. When did they undergo the training?

……

10. Who conducted the training?

……

11. Do you think the training they received was helpful to the role they play in the CTC programme?

……
……

12. In your opinion is the CTC programme targeting the intended people?

a) Yes [ ] (b) No [ ]

Please justify your answer.

……
……
……..

13. Is the programme being delivered according to the original plan?

a) Yes [ ] (b) No [ ]

If your answer is no answer questions 10 and 11.

14. Why is the programme not being implemented as originally planned?

……
……
……..

15. What changes have been made to the programme?

……

……

……

16. Are there any organisations that are involved in the implementation of the CTC programme?

(a) Yes [ ] (b) No [ ]

If yes answer questions 17 to 18.

17. What are the names of the organisations?

……

……

18. How do these organisations participate in the CTC programme?

……

……

……

19. Is the CTC programme monitored?

……

If yes please answer questions 20 and 21. If no answer question 22

20. Who monitors it?

……

……

21. How often is it monitored?

……

22. Why is the programme not monitored?

……
……
……

Section D

23. Are there any challenges that have been encountered during the implementation of the CTC programme?

(a) Yes [ ] (b) No [ ]

If your answer is yes please state the challenges

……
……
……
……
……
……
……

24. What measures have been put in place to address these challenges?

……
……
……
……..

25. In your opinion do you think the CTC programme can be implemented nationwide? Justify.

……
……
……
……
…….

We have come to the end of the questionnaire. Should you wish to contact me the following are my details: NYONDWA ZULU 0979476983

Appendix 3: Questionnaire for Care Givers

I am a student at the University of Zambia currently perusing a Master of Education in Adult Education. I am conducting a research on the implementation of the Community-based Therapeutic Care programme. I intend to collect data which will be used to address various issues that have been raised in my dissertation. To this extent I shall be most thankful if you would participate in my research by answering the questionnaire. Please note that the information gather will be solely used for academic purposes.

Instructions

a). Please don't write your name on the questionnaire.

b). Kindly answer all questions by ticking [√] in the box provided or writing in the space provided.

c). Feel free to respond to the questions as the information obtained will be treated with strict confidentiality. Your response will be highly appreciated.

Section A

1.Sex

a) Male (b) Female

Section B

2.What is the name of your health centre?

……..

3. How did you become a member of the CTC programme?

……
……
……

4. Are there any organisations that participate in the CTC programme?

a) Yes (b) No

If your answer was yes, answer question 5

5. How do they participate in the programme?

……

……

6. What are the names of the organisations?

……

……

7. Are there any challenge that you have noticed in the CTC programme?

a) Yes (b) No

8. If your answer was yes, answer question 9 and 10

9.What are the challenges you are facing?

……

……

……

10. In your opinion, what are the possible solutions?

……

……

……

We have come to the end of the questionnaire. Should you wish to contact me the following are my details: NYONDWA ZULU 0979476983

Appendix 4: Document Review Checklist

1. How was the Community-based Therapeutic Care Programme formulated?

2. Did the community members participate in the formulation of the Community-based Therapeutic Community programme?

3. How did the community members participate in the formulation of the CTC programme?

4. Are there any stakeholders that were involved in the formulation of the CTC programme?

6. In what way did the other stakeholders participate in the formulation of the program?

Appendix 5: Interview Guide for Focus Group Discussion

I am a student at the University of Zambia currently perusing a Master of Education in Adult Education. I am conducting a research on the implementation of the Community-based Therapeutic Care programme. I intend to collect data which will be used to address various issues that have been raised in my dissertation. To this extent I shall be most thankful if you would participate in my focus group discussion.

1. How did you become a member of the CTC programme?

2. Are there any organisations that participate in the CTC programme?

3 How do they participate in the programme?

4. What are the names of the organisations?

5. Are there any challenge that you have noticed in the CTC programme?

6. In your opinion, what are the possible solutions?

We have come to the end of the discussion. Should you wish to contact me the following are my details: NYONDWA ZULU 0979476983

Appendix 6: Timeline

CORE ACTIVITIES	**DETAILS OF ACTIVITIES**	**DURATION**	**PERIOD**
Proposal Writing	a). Problem formulation b). Literature Review c). Designing of the Research	6 months	February 2014 to July 2014

Data Collection	a). Focus group discussions b). Questionnaire Distribution and Collection	2 months	August 2014 to September 2014
Data Analysis	Preparation, Presentation, Organization and Analysis	3 months	Octobers 2014 to December 2014
Report Preparation	Reporting Writing, Typing and Editing	4 months	January 2015 to April 2015
Report Production	Proof Reading, Production and Submission of Final Draft	3 months	May 2015 to July 2015

Appendix 7: Budget

	DETAILS	QUANTITY	COST	TOTAL COST
Stationary	Reams of Paper Pens Box File Note Pad	02 20 02 03	30 150 15 10	60 30 30 30
Transport	Within Lusaka District		500	500
Allowances	Lunch During Data Collection		500	500
Secretarial Services	Printing Drafts and Final Copies of Proposal and Reports		1500	1500
Miscellaneous			1000	1000
GRAND TOTAL				**K3, 650**

Appendix 8: Letter from DRGS

THE UNIVERSITY OF ZAMBIA
SCHOOL OF EDUCATION

Telephone: 291381
Telegram: UNZA, LUSAKA
Telex: UNZALU ZA 44370

PO Box 32379
Lusaka, Zambia
Fax: +260-1-292702

==========

Date 28/10/2014

TO WHOM IT MAY CONCERN

Dear Sir/Madam

RE: FIELD WORK FOR MASTERS/ ~~PhD~~ STUDENTS

The bearer of this letter Mr./Ms. Zulu Nyandwa Computer number 513802747 is a duly registered student at the University of Zambia, School of Education.

He/She is taking a Masters/~~PhD~~ programme in Education. The programme has a fieldwork component which ~~he/~~she has to complete.

We shall greatly appreciate if the necessary assistance is rendered to him/her/.

Yours faithfully

THE UNIVERSITY OF ZAMBIA
ASSISTANT DEAN
SCHOOL OF EDUCATION
P.O. BOX 32379, LUSAKA

Daniel Ndhlovu (Dr)
ASSISTANT DEAN-POSTGRADUATE STUDIES- SCHOOL OF EDUCATION

Cc Dean-Education
Director-DRGS

Appendix 9: Letter of Consent from MCDMCH

Telephone: (260) 211 235341
Fax: (260) 211 235342

In reply please quote:

MCDMCH/7/6/2*No.:*.....

REPUBLIC OF ZAMBIA

MINISTRY OF COMMUNITY DEVELOPMENT, MOTHER AND CHILD HEALTH

OFFICE OF THE PERMANENT SECRETARY
COMMUNITY HOUSE
SADZU ROAD
PRIVATE BAG W 252
LUSAKA

30th October, 2014

The Acting Assistant Dean (PG)
School of Education
The University of Zambia
LUSAKA

RE: PERMISSION TO COLLECT DATA FOR EDUCATION PURPOSE IN HEALTH CENTRES- MS NYONDWA ZULU

The above captioned subject suitably refers.

I am pleased to inform you that the Ministry has no objection to your request as contained in your letter dated 3rd October, 2014. However, your letter does not specify the District or Health Facilities as we need to inform the respective Districts of health facilities.

In view of the foregoing, Ms Nyondwa Zulu may proceed and collect data as may be required by your institution.

Simmy Chapula
For/Permanent Secretary
MINISTRY OF COMMUNITY DEVELOPMENT, MOTHER AND CHILD HEALTH

Appendix 10: Letter from LDHMT

All communications should be addressed to the Community Development Officer

Telephone: +260-211-235554
Telefax: +260-211-236429

In reply please quote

No.:.....

REPUBLIC OF ZAMBIA

MINISTRY OF COMMUNITY DEVELOPMENT MOTHER AND CHILD HEALTH

DISTRICT COMMUNITY HEALTH OFFICE
P.O. BOX 50827
LUSAKA

06th March 2015

Nyondwa Zulu (Ms)
University of Zambia
School of Education
Department of Audit Education
LUSAKA

Dear Ms. Zulu

RE: AUTHORITY TO CONDUCT RESEARCH STUDY IN LUSAKA DISTRICT

We are in receipt of your letter over the above subject.

Please be informed that Lusaka District Community Health Office has no objection for you to conduct a research study on **"The implementation process of the community therapeutic care program"** for academic purposes only.

Please ensure that a copy of the findings is also provided to Lusaka District Community Health Office at the end of the research study.

By copy of this letter, the Health Facility In-Charge for Chaisa, Mandevu and Garden Health Centres are hereby notified and requested to facilitate accordingly.

Yours Sincerely

Dr. Matimba Chiko
ACTING PRINCIPAL CLINICAL CARE OFFICER
For/DISTRICT MEDICAL OFFICER

C.c: The In-Charge: Chaisa, Mandevu and Garden Health Centres
C.c: Assistant Dean Postgraduate: School of Education – Dr. Daniel Ndhlovu