

**EXPERIENCES OF COMMUNITY CARE GIVERS ON
NUTRITIONAL ASSESSMENT OF CHILDREN UNDER 5 YEARS
IN ETHEKWINI DISTRICT**

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Dissertation submitted in fulfilment of the requirements for the Degree in
Masters in Health Sciences in Nursing at the Durban University of Technology

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Declaration

This is to certify that the work is entirely my own and not of any other person, unless explicitly acknowledged (including citation of published and unpublished sources). The work has not previously been submitted in any form to the Durban University of Technology or to any other institution for assessment or for any other purpose.

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Abstract

Introduction

Malnutrition continues to be a major public health problem, especially in children under 5 years of age. Nutritional status is one of the indicators of overall well-being and human resources development of a nation.

Aim of the study

The aim of the study was to explore and describe experiences of Community Care Givers regarding the assessment of malnutrition in children under 5 years of age in eThekweni District Health Sub-district North area six.

Methodology

A qualitative, exploratory, descriptive study was used to conduct the study. Semi-structured individual face to face interviews were conducted with 13 participants. The study was guided by Pender's Model of Health Promotion.

Results

The findings of the study revealed that participants were dissatisfied with mid upper arm circumference training. They reported lack of support and supervision in their performance such that mid upper arm circumference was non-prioritized. They were dissatisfied with remuneration and they worked under unsafe conditions.

Conclusion

In order to combat malnutrition in children under 5 years in the community, Community Care Givers need to be vigorously educated on the rationale of malnutrition assessment of children under 5 years in the communities so that they can have insight into what they are doing. Community Care Givers have multiple roles and may need to prioritize their work; this is not easy and requires specific guidance and training from skilled health professionals.

Dedication

I dedicate this dissertation to:

- The God Almighty, who has been the pillar of my strength throughout the study.
- My one and only loving daughter for her support and encouragement during tough times in this study.

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Glossary of Terms

Acromion and olecranon process: the midpoint between the two processes where MUAC should be assessed (Folashade, Akanbi and Anyarsor 2014: 34).

Community Care Giver Program: a community health programme where services are provided by people who have been chosen by the communities in which they stay and work.

Malnutrition in children: under nutrition which is the result of wrong feeding or lack of food which may lead to stunted growth which may also be linked to development of cognitive deficits, being underweight and wasting.

Morbidity: the state of being diseased or unhealthy within a population.

Mortality: the term used for the number of people who died within a population.

Philamntwana (healthy child): an isiZulu word referring to turning the tide on child mortality.

List of Acronyms

Acronym	Full term
AIDS	Acquired immune deficiency syndrome
CCG	Community Care Givers
ART	Antiretroviral Treatment
CHBC	Community Home Based Care.
CHW	Community Health Worker
CBPHC	Community Based Primary Health Care
DoH	Department of Health
DOTS	Direct Observe Treatment Strategy
EC	Eastern Cape
HIV	Human immunodeficiency virus
HST	Health Systems Trust
HPM	Health Promotion Model
ICDS	Integrated Child Development Services
INP	Integrated Nutrition Programme
KZN	KwaZulu-Natal
KZNDOH	KwaZulu-Natal Department of Health
MDGs	Millennium Development Goals
MUAC	Mid Upper Arm Circumference
NSEM	National Strategy to eliminate malnutrition
NPO	Non-Profit Organization
PEM	Protein Energy Malnutrition
PHC	Primary Health Care
RUTF	Ready to Use Food
TB	Tuberculosis
UNICEF	United Nations Children's Fund
UN	United Nations
WHO	World Health Organization

CHAPTER 1 : OVERVIEW OF THE STUDY

1.1 INTRODUCTION AND BACKGROUND

Nutrition is the cornerstone of the socio-economic development of a country. It is an essential component of Millennium Developmental Goal (MDG) 4 which aims to reduce mortality and morbidity in children under 5 years old (Lodhi, Mahmood-ur-Rehman, Lodhi, Wazir, Taimoor and Jadoon 2010: 124). According to Biggs (2012: 1) protein energy malnutrition (PEM) has been identified as a major health problem in South Africa. It is not only the cause of mortality and morbidity but also leads to physical and mental impairment in children. The United Nations Children's Fund (UNICEF) (2012: 3) describes malnutrition as a silent emergency which places a heavy burden on many families with low income. The World Health Organization (WHO) and UNICEF developed the approach of community based management of acute malnutrition to prevent deaths due to severe acute malnutrition among children under 5 years. WHO and UNICEF also suggested a community based monitoring approach as being the central plank of the child survival and development revolution (Biggs 2012: 1).

Home based health care has been advocated by the WHO to ensure improved accessibility to effective and efficient health care for communities in home settings. Home based care also aims to improve the health and wellbeing of children and contributes to improving mortality and morbidity reduction (WHO 2010:2). According to William (2013: 4), the United Nations (UN) and all health funders participated in the formulation of Community Based Primary Health Care (CBPHC) approach which has two components. The first component is growth monitoring of children which includes nutrition assessment and the general wellbeing of the child. The second component is the issuing of nutritional supplements to under-weight children. William goes on to state that in South Africa the average incidence of severe acute malnutrition in children under 5 years was 4.4 cases per 1000 in 2013, and

KwaZulu-Natal Health (KZN) had 13 cases per 1000 in the same year, which was the highest nationally. Vitamin A deficiency was found to be the most common micronutrient deficiency (William 2013: 3). One in every five children aged less than 5 years in low income, developing countries is malnourished.

The South African government has implemented various strategies to address this problem of malnutrition. One such strategy is community based nutritional assessment in which Community Care Givers (CCGs) assess malnutrition through measuring the mid upper arm circumference (MUAC) in children under 5, for early identification of malnutrition and early referral to health care facilities. Another strategy is dietary diversity in the form of Ready to Use Food (RUTF) given to malnourished children. The aim of these strategies is to improve malnutrition in children and reduce mortality and morbidity (William 2013:4).

1.2 PROBLEM STATEMENT

There are CCGs in the communities that are employed to screen babies for malnutrition using MUAC. The researcher has observed that children come to the clinic already having severe malnutrition, when it is expected that the assessment conducted by CCGs will assist in identifying malnutrition early and refer the child to the clinic. This study discusses the experiences of CCGs so that the researcher might find out the reasons for children coming to the clinic with severe malnutrition. For the period January 2014 to April 2015, 187 babies and children were presented to the North area six PHC clinics with severe malnutrition.

1.3 AIM OF THE STUDY

The aim of the study was to explore and describe experiences of CCGs on the assessment of malnutrition in children under 5 years of age.

1.4 MAIN RESEARCH QUESTION

What are the experiences of CCGs regarding assessment of malnutrition in children under 5 years of age?

Sub-questions

What perspectives facilitate or hinder nutritional assessment?

- What is the level of knowledge of CCGs regarding the nutritional assessment of children under 5 years?
- How does training influence nutritional assessment?
- How can nutritional assessment skill be improved?

1.5 SIGNIFICANCE OF THE STUDY

The health care delivery system might benefit from this study, in that there might be fewer admissions for chronically ill babies suffering from malnutrition and more beds will be available for acutely ill babies. Primary Healthcare might be improved as disease prevention and health promotion is encouraged leading to a decrease in mortality rate in children under 5 years of age. Health promotion might be strengthened thus benefiting communities. The results of the study might also be used by policy makers to strengthen the home based care programme. The practice of the CCGs in nutrition assessment in under 5 year olds might improve. The results of the study could be used by PHC clinics to strengthen the programme of nutritional assessment of children under 5 years.

1.6 SUMMARY OF THE CHAPTER

To conclude, the government is promoting decentralization of services in order to promote health and prevent diseases in communities, and should be optimized for the benefit of the communities, especially regarding the formulation and the implementation of Philamntwana sites where CCGs are assessing nutritional status of children under 5 years using MUAC.

CHAPTER 2 : LITERATURE REVIEW

2.1 INTRODUCTION

According to Grove, Burns and Gray (2013), a literature review is an organized written presentation of what the researcher finds when she or he reviews the literature. A literature review summarizes what has been published on a topic by scholars and presents relevant research findings. The researcher develops a general understanding of the concepts to be examined in relation to the topic. This provides the background for conducting the study and interpreting the findings (Grove, Burns and Gray 2013: 98).

This chapter focuses on what is happening in developing and developed countries in terms of malnutrition in children under 5 years of age as well as the implementation of community based nutritional approaches in other countries aimed at reducing mortality and morbidity in children under 5 years of age, as per MDG 4. Search engines used to source literature included Academic Search Complete, CINAHL, EBSCO Host, ERIC, Google Scholar, Health Source-Nursing/Academic Edition and MEDLINE. Articles that were older than 5 years were excluded from the search, as well as articles that were in languages other than English.

2.2 GLOBAL VIEW OF CCGs

The WHO's recent estimates indicate that 8.5 million infants less than six months of age throughout the world are wasted from a nutritional point of view (WHO 2012: 887). The WHO growth standards define wasting as a weight for length z-score of <-2 . In the child's Road to Health Booklet there are three graduated lines that are used to interpret the child's growth or nutrition status. If the weight is plotted above -2 lines, the child is not low weight for age. If the weight is plotted below the -2 line the child is low weight for age, and if the child's weight is below -3 line, the child is very low weight for age (WHO 2012: 887) and the clinical signs of marasmus or kwashiorkor may be observed. Appendix 8.

This type of malnutrition is known as severe acute malnutrition (SAM). The risk of under nutrition in infants is increased in preterm and low birth weight infants born to young rural, poor nourished mothers of lower socio-economic or educational status. According to the WHO (2012: 887), in poor regions, low rates of exclusive breastfeeding and mixed feeding as early as two months of age exposes infants to contamination and to foods with low nutritional density (WHO 2012: 887).

The WHO agreed that the nurturing qualities of environments where children grow up and live matter the most for their development. The WHO further emphasized that parents cannot provide strong nurturing environments without assistance from local, regional, national and international agencies. In addition, the importance of care giver-child interactions for survival and healthy development of young children is important, hence the commitment made by the UN in response to MDG 4 (WHO 2012: 889). The UNICEF, WHO and World Bank (2012: 1) assert that nutrition has increasingly been recognized as a basic pillar for social and economic development. The reduction of infant and young child malnutrition is essential to the achievement of the MDGs particularly those related to the eradication of extreme poverty and hunger MDG 1 and child survival MDG 4. Given the effect of early childhood nutrition on health and cognitive development, improving nutrition also impacts MDGs related to universal primary education, promotion of gender equality and empowerment of women, improvements of maternal health and combating HIV/AIDS (UNICEF, WHO and World Bank 2012: 1). In May 2012, the UN Secretary General, declared the Zero Hunger Challenge, which initiated powerful, high-level advocacy for a major advance in global efforts on food and nutrition security. The Zero Hunger Challenge aims to encourage different stakeholders, governments, regional organizations, farmers, businesses, civil society, donors, foundations and the research community to join the Secretary General to promote effective policies, increased investments in order to provide sustained development that supports hunger reduction (UNICEF, WHO and World Bank 2012: 1).

2.2.1 Use of MUAC in Sub-Saharan Africa

Meshram, Laxmaiah, Reddy, Ravindranath, Venkaiah and Brahmam (2011: 100) conducted a study in India and found that malnutrition is still a problem among children less than three years old. This malnutrition is said to be associated with gender, house hold wealth index, morbidity and hygienic practices. Early onset of under nutrition also points to the fact that improvement of child nutrition is dependent on improving family nutrition, health and hygiene. Encouraging maternal education along with maternal health promotion and personal hygiene might improve child nutrition and health status (Meshram *et al.* 2012: 100). Further to this, Musa *et al.* (2014: 5) argue that over 40% of Indian children are malnourished, which is twice as high as those in Sub-Saharan Africa. Anthropometry has become a practical tool for evaluating the nutritional status for children and MUAC is often used for community screening in therapeutic feeding programmes. In addition, socio-economic factors, poor nutrition, mother's knowledge and feeding practices lead to the increase in prevalence of malnutrition. Therefore, improvements in child feeding and better maternal education are needed to maintain the nutritional status of children under 5 years of age (Musa *et al.* 2014: 6).

According to Desai *et al.* (2014: 762), India shares the largest burden of under-nutrition in the world. Out of all the under-nourished children, more than three-fourths of the children in the yellow or red category had not come into the green category even a single time during their first year of their life despite being covered under Integrated Child Development Services (ICDS). The red category is the severely under-weight child and the child is referred to ICDS with the mother, whereas the yellow category is the under-weight child that is given food supplements to take home and the green category is the child that is well nourished. MUAC is being used to identify these categories of children who are under-weight (Desai *et al.* 2014: 762). Furthermore, these authors assert that more than three quarters of under-nourished children have shown either growth stagnation or faltering at the end of one year despite initiation of

ICDS. This indicates the need for early identification and special nutritional care of the yellow and red categories of children (Desai *et al.* 2014: 764).

Das and Bose (2012: 582) emphasized that MUAC was an appropriate indicator for the assessment of acute under-nutrition in children under 5 years. This indicator is useful for both screening of acute under-nutrition and for estimating prevalence of under-nutrition at a population level. The assessment of under 5 year olds' nutritional status using MUAC requires no equipment apart from a tape measure. The ease with which MUAC can be assessed makes it suitable for nutritional screening during the height of an emergency where time and skilled personnel are at a premium (Das and Bose 2012: 582). In addition, measuring MUAC has several advantages such as the measurement being taken quickly and at little cost. It also does not require sophisticated equipment and only requires the most basic literacy level to carry out (Das and Bose 2012: 583).

Mamulwar *et al.* (2014: 250) conducted a study on children under 5 years and the results indicated that there was an age wise trend in malnutrition in terms of all three anthropometric parameters namely; underweight, stunting and wasting. It is evident that nutritional status of children deteriorates progressively through the first three years of life and stunting is the predominant type of malnutrition (Mamulwar *et al.* 2014: 250). These authors further assert that the age trends of malnutrition may be due to improper weaning and recurrent infections which are common in this age group. Thus an appropriate feeding and weaning process has to be introduced in the population by appropriate parental health education to improve the nutritional status of children under 5. This period is the critical window of opportunity to prevent under-nutrition from before pregnancy to the first two years of life (Mamulwar *et al.* 2014: 250). The authors also suggest that severely malnourished children should be surveyed on a regular basis and home visits should be conducted. The families from the community should be encouraged to engage in home based activities to improve the nutritional status of their children. Parents of malnourished children should be counselled on nutritious

diet, importance of family planning and personal hygiene by the Community Health Workers (CHWs) at the time of home visits (Mamulwar *et al.* 2014: 251).

2.3 TECHNIQUE OF MEASURING MUAC IN AFRICAN COUNTRIES

2.3.1 Uganda

In a study conducted in Northern Uganda, Mokori, Hendriks, Oriskushaba, and Oelofse (2013: 210) found that to realize a lasting impact, future interventions should endeavour to address the entire household, including men and women, as they both have a profound direct and supportive role to play in addressing the causes of under nutrition in children. As much as supplementary feeding programmes are important in identifying and treating acutely malnourished children, they are not sufficient in addressing under nutrition in the long term.

Strategies that target infants aged 0 to 23 months old and their mothers are more critical in reducing under nutrition than supplementary feeding programmes which only target a small percentage of the community (Mokori *et al.* 2013: 210). According to Folashade *et al.* (2014: 37), child malnutrition is still a major concern in developing countries that affects millions of young children. The way growth monitoring is performed in many settings to assess weight gain lacks guidelines to score and interpret weight gain and as a result, the direction of the child's growth curve is often just checked routinely without paying careful attention to the curve on the chart. Growth monitoring and promotion of optimal nutrition are essential components of health care for all children. Monitoring the child's growth helps to confirm the child's healthy growth and development or identify early potential nutritional or health problems. When potential problems are identified early, health professionals and parents can work together to initiate action before the child's nutritional status or health is seriously compromised. Further to this, Folashade *et al.* (2014: 34) emphasized the technique of measuring MUAC, which is measured using a tape placed around the upper arm, midway between the

olecranon and acromion processes. Care is taken not to pull the tape too tightly. The tape measure is then measured with a ruler to obtain the MUAC score (Folashade *et al.* 2014: 34).

Connor and Manary (2011: 983) posit that MUAC is a linear measurement and is less sensitive to the temporary gains in total body water, it is temporary sensitive to an increase in muscle mass (amino storage) and secondary to an increase in subcutaneous fat (energy storage). This is important in practice as negative changes may indicate poor feeding practices at home or inter-current system infections. Both authors continue to state that, MUAC can be used to monitor the recovery of the malnourished child in much the same way as it is measured using weight, and it is highly portable and lends itself well to decentralization of care, as opposed to a common Salter weight scale. MUAC shows faster growth during early life in children, so children below the age of 12 months should be removed from using MUAC. MUAC may be a better predictor of overall bodily changes in children from 1 to 5 years of age (Connor and Manary 2011: 983).

2.3.2 Jamaica

In a study conducted in Jamaica by Cory, Boyle, McClain and Sutherland (2014: 282), the results indicated that, as in many other developing nations, Jamaica is now facing the added burden of over-nutrition in addition to the long-standing public health issue of under-nutrition. In this sample; a total of ten children were considered overweight. It was indicated that lifestyle, socio-economic, and political changes may be predisposing Jamaican children to obesity and the development of non-communicable chronic diseases, including increased morbidity and mortality from heart disease and atherosclerosis. From a public health perspective, the development of policy and interventions that target both under-nourished and over-nourished children will present unique challenges. This may be especially true in developing nations that often lack sufficient economic and political support for complex public health problems (Cory *et al.* 2014: 282).

2.3.3 Kenya

The Government of Kenya has proposed a strategy in which CHWs are trained to deliver community health services, including basic PHC, growth monitoring and referral of critically ill patients to hospital (Ministry of Health 2006: 4). The CHWs are expected to undertake door to door anthropometric screening of children under 5 years and provide nutrition counselling and education (Mwangome, Fegan, Fulford, Prentice and Berkley 2012a: 622). Furthermore, MUAC may be used to diagnose severe acute malnutrition among children aged 6 to 59 months old and is a better predictor of mortality than weight for length. In rural communities, MUAC could be a valuable tool for use by CHWs for early detection of acute malnutrition in infants. However, reliability of MUAC measurement in early infancy is unknown, as the cut off values to determine intervention thresholds have not been defined (Mwangome *et al.* 2012: 623). According to Fernandez, Delchevalerie and Van Herp (2010: 198) MUAC is found to be the best indicator for screening and detection of malnutrition in a community. Screening methods based on comparisons with growth curves or weight gain are not likely to be predictive of mortality risks; MUAC is the better predictor (Fernandez *et al.* 2010: 199).

Divya *et al.* (2013: 144) found that childhood malnutrition is a massive crisis caused by a combination of factors including inadequate food intake, childhood diseases, harmful child care practices, low socio-economic status, all these contribute to poor health and millions of deaths annually. Malnutrition is like an iceberg, which affects the community both directly and indirectly. The direct effects are the occurrence of frank and subclinical nutritional deficiency diseases. The indirect effects are high morbidity and mortality among young children. Malnutrition is an extremely complex phenomenon with multiple causes, multiple manifestations and is intergenerational. Divya *et al.* (2013: 144) concluded that PEM is a significant public health problem. Thus, implementation of appropriate health awareness programmes and improvement of socio-economic conditions are required to improve the nutritional status of children. A significant number of mothers were unaware of the prevention and management of under-5 nutritional problems. Therefore,

frequent health education campaigns should be conducted in the field of nutrition (Divya *et al.* 2013: 144).

Ashworth and Ferguson (2009: 46), assert that there are strong justifications for establishing community-based management of severe malnutrition within routine health care. Community-based management could benefit children by reducing exposure to hospital-acquired infections and providing continuity of care after discharge from hospital. It could benefit families by reducing the time caregivers spend away from home and the risk of possible neglect of siblings, and by reducing opportunity costs. Additionally, it can benefit the health system through capacity-building and being the catalyst for strengthening nutrition activities within clinics as well as provide closer integration of curative and preventive services. Community based management of malnutrition could lower costs if fewer cases are referred to hospital or if children are discharged sooner than is currently the case (Ashworth and Ferguson 2009: 46).

According to Collins *et al.* (2010: 60), the change from the use of Weight for Height percentage of Median to MUAC for screening and admission has many practical benefits that allow programmes to achieve high coverage and treat many more children. MUAC is simple and allows CCGs and volunteers to refer children for admission directly to the programme. MUAC is a more sensitive indicator of mortality risk associated with malnutrition, it is therefore a better measure for the identification of children most in need of treatment (Collins *et al.* 2010: 60).

According to Mennillo and Rayess (2014: 22), childhood malnutrition is a serious problem that needs to be addressed worldwide. Supplementary feeding programmes are an effective way of combating childhood malnutrition, however implementation is often challenging. Creative solutions are needed to address the unique challenges faced by rural villages in developing countries (Mennillo and Rayess 2014: 23). According to Harmel *et al.* (2015: 59), in order to assess nutritional status, trained operators need to

measure MUAC in children and young infants aged 6 to 47 months using the tape. In a Rwandan refugee camp, it was found that there was an unsatisfactory balance of sensitivity and specificity of MUAC which led to the use of weight for height as a gold standard for screening malnutrition (Harmel *et al.* 2015: 59). These authors argue that the role of MUAC is not to estimate weight for height but is a better predictor than weight for height in predicting mortality and kwashiorkor. MUAC is a reliable method of estimating childhood malnutrition especially in the field where obtaining accurate height and weight is difficult (Harmel *et al.* 2015: 59).

2.3.4 South Africa

South Africa is a diverse country and has a combination of low, middle and high-income groups, KZN and Eastern Cape (EC) provinces accommodate about 35% of the South African population. In 1995, just after the first democratic elections, the National Department of Health in South Africa established the Integrated Nutrition Programme (INP). This programme coordinated an intersectoral approach to solving nutritional problems for vulnerable groups including children younger than 5 years old (Lesiapeto, Smuts, Hanekom, Du Plessis and Faber 2010: 202). According to these authors, stunting and underweight in children under 5 is associated mainly with socio-economic, maternal and child factors in the rural communities of EC and KZN. The INP aimed to address the underlying socio-economic, environmental, and educational and health related causes of malnutrition. In its efforts to assist government in improving the nutritional status of South Africans, the Health Systems Trust (HST), a Non-Profit Organization (NPO), undertook to implement an integrated project that was based on the INP principles in selected areas of the EC and KZN provinces (Lesiapeto *et al.* 2010: 202).

According to Lodhi *et al.* (2010: 124), nutrition is a cornerstone of the socio-economic status of a country. It is an essential component of MGD4 and PHC (Lodhi *et al.* 2010: 124). The authors further argue that malnutrition is one of the major public health challenges in developing countries usually referred to

as a silent emergency. In addition, they assert that PEM has been identified as a health and nutritional problem which not only is a cause of mortality and morbidity but also leads to physical and mental impairment in children. Protein energy malnutrition is mainly due to inadequate intake of both quantity and quality of food (Lodhi *et al.* 2010: 124). MUAC has been adopted as one of the strategies to screen for malnutrition in children under 5 years of age. MUAC is inexpensive, more commonly available, does not require a chart to calculate, and is easier to measure than weight for height Z- score, and an easy tool for use by CCGs (Shah, Shaikh, Memon, Siyal, and Nizamani 2014: 97).

Le Roux *et al.* (2010: 7) assert that given the high prevalence of stunting among South African children under 5 years old (over 25%), nutrition that promotes healthy linear growth is of paramount importance. Additionally, the introduction of the Philani program for the rehabilitation of malnourished children is of significance. The recovery in length appropriate to age is most likely if the child's nutrition can improve before the age of two to three years old, and risks of accelerated weight gain for under-nourished babies is less likely if the child recovers by the age of 12 to 18 months old (Le Roux *et al.* 2010: 7). At the same time, it must not be forgotten that achievement of normal weight remains a priority in the townships of South Africa, where adequate nutrition remains scarce and the immediate health consequences of malnutrition take precedence (Le Roux *et al.* 2010: 7). However, according to Rossouw, Grant and Viljoen (2012: 5), South Africa is in a rural-urban transition phase and it is known that populations in transition towards urbanization may experience an increase in overweight and obesity. Further to this, South Africa is facing the so-called double burden of disease, where overweight increases the risks of non-communicable, cardio-vascular and metabolic diseases and childhood under-nutrition leads to stunted growth and under-development. These authors conducted a study in EC and KZN and they discovered that there is disparity between mother's or caregiver's weight and the child's nutritional status; while mothers or caregivers were overweight

or obese the children were malnourished (Rossouw, Grant and Viljoen 2012: 5).

2.3.4.1 Establishment of CCGs as a community based service strategy in South Africa

In 2003 the Department of Health released the CHWs' framework proposing a stipend for volunteers to conduct door to door visits as additional services to the vulnerable communities. A more recent version referred to as the CCGs' policy framework has been established and has a link with NPOs. This policy is to ensure additional health service provision to patients at a community level (Department of Health and Department of Social Development 2009: 3). Community based services are now an established and growing part of the District Health System budget and there is now virtually no PHC facility in South Africa without its complement of lay workers, either facility based or not, who are providing home based care within its catchment area. It can be facilitated by the District Health Department or volunteer health care givers linked with NPOs in the community (Department of Health 2012: 4).

2.4 SUMMARY OF THE CHAPTER

Peer reviewed literature was used to compare and contrast the current nutritional status of children under 5 years of age in South Africa with that of other countries. The focus was on MUAC conducted by CCGs in the nutritional assessment of children under 5 years of age. The following chapter will discuss the theoretical framework that guided the study.

CHAPTER 3 : THEORETICAL FRAMEWORK

3.1 INTRODUCTION

In the previous chapter, the literature review was presented. This chapter presents the theoretical framework which guided the study. According to Polit and Beck (2012), a theoretical framework is the overall conceptual underpinning of the study. These authors state further that the research framework summarizes and integrates what the researcher knows about a phenomenon more succinctly and clearly than a literary explanation, and allows researchers to grasp the bigger picture of a phenomenon (Polit and Beck 2012: 128). According to Grove, Burns and Gray (2013: 116), a framework is an abstract, logical structure of meaning that guides the development of the study and enables the researcher to link the findings to the body of knowledge in nursing (Grove, Burns and Gray 2013: 116).

There are a number of health promotion models available as listed below. Those that have been used to guide the study will be described in detail. They are as follows:

- The Health Belief Model is a well-known model that became significant because of its emphasis on predicting individual preventive health behaviour. Consequently, this theory is based on an individual's idea about an appraisal of perceived benefits compared to perceived barriers and costs of taking a health action (Maville and Huerta 2008: 45).
- The Transtheoretical (Stages of Change) Model (Prochaska and Velicer 1997) is a model that has been the basis of numerous interventions designed to change people's behaviour such as smoking.

This study was guided by the revised Pender's Health Promotion Model (HPM). This model was first developed in the early 1980s with the initial version appearing in nursing literature (Pender 1982: 50). Pender's HPM proposed a framework for integrating nursing and behavioural science perspectives on factors influencing health behaviours. This framework offered a guide for exploration of the complex bio-psychosocial processes that motivate individuals to engage in behaviours directed towards the enhancement of health. Pender's HPM was revised with the aim of including three new variables which are: activity related affect, commitment to a plan of action, and immediate competing demands and preferences (Pender, Murdaugh, and Parsons 2006: 51). These authors state that HPM integrates concepts from the expectancy-value model of human motivation and social cognitive theory to form the theoretical basis. In other words, people will work toward what they feel is of value to them and are influenced by internal and external factors unique to the individual (Pender, Murdaugh, and Parsons 2006: 47). According to Maville and Huerta (2008), Pender's HPM has been used extensively to provide the framework and guidance for health promotion activities, and these activities have included the preparation of individual clients' health promotion plans, health promotion programmes for work sites, and community health promotion programmes (Maville and Huerta 2008: 50).

HPM theoretical framework comprises 12 elements, namely:

- Individual characteristics and experience;
- Behaviour specific cognitions and affect;
- Perceived benefit of action;
- Perceived barriers to action;
- Prior related behaviour;
- Perceived self-efficacy;
- Personal factors;
- Interpersonal influences;
- Situational influences;
- Commitment to a plan of action;
- Immediate competing demands and preferences; and

- Activities related affect (Pender *et al.* 2006: 49).

**INDIVIDUALBEHAVIOUR-SPECIFICBEHAVIOURALCHARACTERISTICS, COGNITION
OUTCOME, EXPERIENCES AND AFFECT**

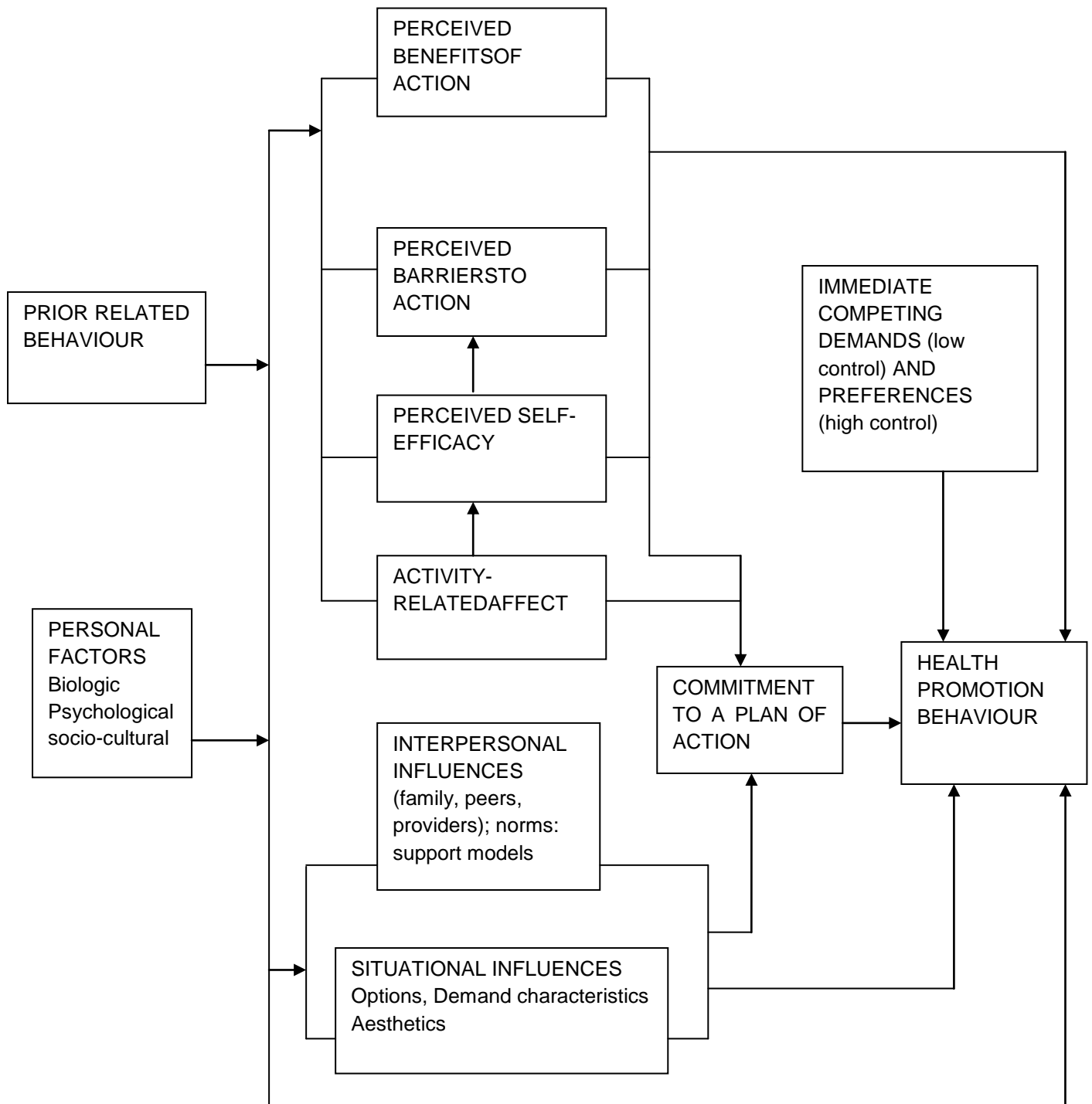


Figure 3.1: Elements of Pender's Health Promotion Model (Pender *et al.* 2006: 49)

3.1.1 Individual characteristics and experiences

Each person has unique personal characteristics and experiences that affect subsequent actions. The importance of their effect depends on the target behaviour being considered. Individual characteristics or aspects of past experiences selected provide flexibility in the HPM (Pender *et al.* 2006: 51). The CCGs' individual characteristics and experiences may have a direct effect on their work which is assessing nutritional status of children under 5 years of age. These characteristics and experiences may either affect them negatively or positively and might have the same effect on their work.

3.1.2 Prior related behaviour

Prior related behaviour is proposed as having both direct and indirect effect on the likelihood of engaging in health promoting behaviours. The direct effect of past behaviour on current health-promoting behaviour may be due to habit formation, predisposing one to engage in the behaviour automatically with little attention to the specific details of its execution (Pender *et al.* 2006: 51). The CCGs who have been working in the community for too long or who might have worked as CHWs before might either be paying or not paying attention to what they are doing because of their prior related behaviour. As such they may either not be able to identify when MUAC is deviating from the normal in order to refer the child or may be particularly alert to the MUAC reading.

3.1.3 Personal factors

The relevant personal factors are predictive of a given behaviour and are shaped by the nature of the target behaviour being considered. In the revised Pender's HPM, personal factors are categorized as biologic, psychological, and socio-cultural. Biologic factors include age; psychological factors include self-esteem, self-motivation; and socio-cultural factors include race, ethnicity, education and socio-economic status (Pender *et al.* 2006: 52). Young CCGs might have low self-esteem due to the pressure from their peers about the nature of work they are doing in the community which might not be viewed in

a good light by peers. They might have chosen community work because of unemployment not because of the love for it and this might compromise nutrition assessment in under 5 children.

3.1.4 Behaviour specific cognitions and affects

Behaviour-specific variables within Pender's HPM are considered to have major motivational significance. Thus these variables constitute a critical core for intervention, because they are subject to modification through nursing actions. Measuring change in these variables is essential to determine if such changes actually result from the intervention and in turn influence changes in commitment or in the occurrence of health-behaviours (Pender *et al.* 2006: 52). If CCGs are unsure of how the MUAC procedure is done, or the significance of nutritional assessment in children under 5 years is unknown, this might affect their work of nutrition assessment negatively. On the other hand, if CCGs are well aware of these facts this might affect their work positively.

3.1.5 Perceived benefit of action

An individual's plan to engage in a particular behaviour hinge on the anticipated benefits that will occur. In Pender's HPM, perceived benefits are proposed to directly motivate behaviour as well as indirectly motivate behaviour through determining the extent of commitment to a plan of action to engage in the behaviours from which the anticipated benefits will results (Pender *et al.* 2006: 53). If CCGs are not aware of the benefits of nutrition assessment and doing it correctly, their work might be affected.

3.1.6 Perceived barriers to action

Barriers may be imagined or real. They consist of perceptions concerning the unavailability, inconvenience, expense, difficulty or time consuming nature of a particular action. Barriers are often viewed as mental blocks, hurdles and personal costs of undertaking a given behaviour (Pender *et al.* 2006:53). The CCG's remuneration is still funded by an NPO, which means that their

remuneration is not stable due to signing on and off of contracts that might cause their behaviour to deteriorate and children not to be assessed regarding their nutrition. CCGs may perceive doing MUAC as too tedious with children crying and wriggling making it hard to find the correct spot to measure.

3.1.7 Perceived self-efficacy

Self-efficacy is a judgment of personal capability to organize and carry out a particular course of action. Judgments of personal efficacy are distinguished from outcome expectations. Perceptions of skill and competence in a particular domain motivate individuals to engage in those behaviours in which they excel. Feeling efficacious and skilled in one's performance is likely to encourage one to engage in the target behaviour more frequently (Pender *et al.* 2006:53). If CCGs are not competent and are unsure of what they are doing, they will not have perceived self-efficacy, and that might affect their performance.

3.1.8 Activity related affect

Activity related affect consists of three components namely: emotional arousal to the act itself (act related), self-acting (self-related) or environment in which the action takes place (context related). Behaviours associated with positive affect are likely to be repeated, whereas those associated with negative affect are likely to be avoided (Pender *et al.* 2006: 54). The CCGs who have no experience in community work, children, and mothers or caregivers, might be put off by their behaviour or attitude thus lose insight and be unable to inform the mother or caregiver that her/his child is malnourished.

3.1.9 Interpersonal influences

According to Pender's HPM, interpersonal influences are cognitions concerning the behaviours, beliefs or attitudes of others. Interpersonal influences include norms, social support and modelling (vicarious learning through observing others engaged in a particular behaviour). These three

interpersonal processes affect individual's pre-disposition to engage in health promoting behaviour (Pender *et al.* 2006: 55). If for instance a newer CCG observes an older one doing the work they might be influenced on how they do it in future.

3.1.10 Situational influences

Situational influences on health-promoting behaviour include perceptions of options available, demand characteristics and aesthetic features of the environment in which a given behaviour is proposed to take place. Individuals are drawn to and perform more competently in situations or environmental contexts in which they feel compatible rather than incompatible (Pender *et al.* 2006: 55). If the CCGs are not being accepted during home visits or they feel threatened, this will affect the way they work.

3.1.11 Commitment to a plan of action

Commitment to a plan of action implies the commitment to carry out a specific action at a given time and place and with a specified person irrespective of competing preferences (Pender *et al.* 2006: 56). If the CCGs have plans for their daily work irrespective of their demand preferences their home visits will not be affected.

3.1.12 Immediate competing demands and preferences

Competing demands are viewed as alternative behaviours over which individuals have a relatively low level of control because of environmental contingencies such as work or family care responsibilities. Failure to respond to a competing demand may have untoward effects for the self or for significant others (Pender *et al.* 2006: 56). If the CCG has another commitment either in the family, having a small baby or other work, that might prevent her focusing on her work in the community and so not assessing nutrition in children under 5 years of age the way that she should be.

3.2 ELEMENTS WHICH GUIDED THE STUDY

Out of 12 elements of the framework, seven elements had overlapping meanings the researcher decided not to use these elements as they did not have an input in the study: perceived benefit of action, perceived self-efficacy, personal factors, interpersonal influences, and activity related affect, commitment to a plan of action and prior related behaviour. The five elements that were used in the study are:

- Individual characteristics and experiences;
- Situational influences;
- Immediate competing demands and preferences;
- Behaviour specific cognitions and affect; and
- Perceived barriers to action.

3.3 SUMMARY OF THE CHAPTER

This chapter presented the theoretical framework which was used to guide the study. The next chapter discusses the methodology that guided the study.

CHAPTER 4 : RESEARCH METHODOLOGY

4.1 INTRODUCTION

In the previous chapter, the selected theoretical framework was presented. This chapter discusses the research methodology that guided the study. This chapter focuses on the research design, setting; sampling process, pre-testing of the data collection tool, data collection process, data analysis and ethical considerations.

4.2 RESEARCH DESIGN

According to Grove, Burns and Gray (2013:195), a research design is a detailed plan according to which the research is conducted. A qualitative exploratory, descriptive study design was employed in which semi-structured questions were used to describe the experiences of CCGs in community based nutritional assessment of children under 5 years of age.

4.2.1 Qualitative research

Qualitative research is an inquiry process of understanding based on distinct methodological traditions of enquiry that explore a social or human problem. The researcher builds a complex, holistic, picture, and conducts the study in a natural setting (Creswell 2011: 378). The rationale for the researcher to choose this type of research methodology is that, within a naturalistic holistic framework, qualitative research allows the researchers to explore the depth, richness and complexity inherent in the lives of human beings (Grove, Burns and Gray 2013: 57).

4.2.2 Exploratory research

Exploratory research investigates the full nature of the phenomenon, the manner in which it is manifested and other factors to which it is related (Polit and Beck 2012: 18). The researcher wanted to explore the experiences of the

CCGs in the assessment of malnutrition status of children under 5 years of age.

4.2.3 Descriptive research

A descriptive research design is crafted to gain more information about characteristics within a particular field of study. Its purpose is to provide a picture of situations as they naturally happen (Grove, Burns and Gray 2013: 215). In this study, the researcher aimed to describe the experiences of the CCGs in the assessment of malnutrition in children of under 5 years of age. Exploratory, descriptive, qualitative research studies are conducted to address an issue or problem in need of a solution (Grove, Burns and Gray 2013: 66).

4.3 PHILOSOPHICAL UNDERPINNING OF THE STUDY

Creswell and Plano (2010: 74) state that a research paradigm is based on assumptions that relate to the nature of reality or existence. In this study, the assumptions of the naturalistic paradigm were used. For the naturalistic inquirer, reality is not a fixed entity but rather is a construction of the individuals participating in the research; reality exists within a context, and many constructions are possible. If there is multiple interpretation of reality that exists in people's minds, then there is no process by which the ultimate truth or falsity of the constructions can be determined (Polit and Beck 2012: 12).

4.4 STUDY SETTING

Polit and Beck (2012: 743) describe a setting as an environment where the data is collected for the study. The study was conducted in North area six of eThekweni District which is one of the 11 districts in the KZN province of South Africa and is situated within eThekweni municipality. EThekweni municipality is divided into three sub-districts namely; North, South and West and the North is further subdivided into six areas. The North sub-district is home to approximately 1.5 million people who comprise 31% of the population of

eThekwini municipality. North area six is at the boundary between eThekwini and iLembe Districts, which where severe cases of malnutrition have been identified. The total number of CCGs in North area six both trained and untrained in nutritional assessment in children under 5 years of age is 180.

4.5 STUDY POPULATION

Population refers to the set of individuals with common characteristics that the researcher wishes to study (Polit and Beck 2014: 61). The total population in the study comprised of all CCGs in North area six and the target population was all CCGs trained in nutritional assessment in children under 5 years of age. Only 78 CCGs were trained in nutritional assessment in North area six. The CCGs were placed according to the ward areas and they reported to the PHC nurse of that catchment population. They serve the wards as outlined in Table 4.1.

Table 4.1: Placement of CCGs in North area six

Ward	Number of CCGs
Ward 58	15
Ward 59	11
Ward 60	20
Ward 61	11
Ward 62	21
Total	78

4.6 SAMPLING

Stommel and Wills (2004: 297) define a population as any universe of subjects, cases, units or observations. The target population refers to the population of all potential participants that meets the study inclusion criteria in which the researcher is interested (Stommel and Wills 2004: 444). Purposive sampling of CCGs was used for this study which means that the researcher specifically selected particular elements, events, or incidents to include in the study (Grove, Burns, and Grey 2013: 365). According to Polit and Beck (2012: 517), purposive sampling aims to include participants that the researcher will

gain the most information from hence it is known as purposeful, judgmental or selective sampling.

4.7 SAMPLE SIZE

According to Polit and Beck (2012: 521), qualitative research has no direct fixed sample size because it is driven by the information needs of the research. The sampling size is determined by the quality of data attained from the participants, situation and events (Grove, Burns and Gray 2013: 371). The sample size is determined by the rich information needed to be obtained in order to understand and learn more about the phenomenon of the study. The richness of data is required in order to gain insight and discover new meanings in an area of the study (Grove, Burns and Gray 2013: 371). The sample size is guided by the principle of data saturation, which is the point where no new information is obtained from participants. When repeated information is obtained during data collection this represents the point of completeness of the data. The minimum sample size was 10 participants after which three additional participants were sampled to confirm data saturation.

4.8 DATA COLLECTION

Data were collected using semi-structured individual face to face interviews (Appendices 6a and 6b). This method allowed participants freedom to express their opinion or understanding of the phenomenon without the restrictions of closed ended questions or the interviewer's opinion (Grove, Burns and Gray 2013: 271). Interviews were conducted by the researcher in the communities where the CCGs work and lasted for about 20-30 minutes after the information session and the letter had been read and consent signed (Appendices 5a and 5b). Interviews were conducted in a private quiet place where there were no distractions, in the language that the participants were comfortable with. Interviews were audio recorded and field notes were written. The researcher transcribed the interviews verbatim and those conducted in isiZulu were translated into English by a qualified language practitioner and

translated back to isiZulu to ensure that richness of data was not lost during translation (Appendix 6b).

4.9 DATA COLLECTION PROCESS

Interviews began with a broad descriptive question and followed with probing questions to elicit further details on a specific subject to uncover or draw attention to what was not mentioned. The interview guide consisted of two sections (Appendices 5a and b); Section 1 consisted of participant's demographic data and Section 2 consisted of a grand tour question as well as probing questions as guided by the theoretical framework. A grand tour question is the broad essential question on the research topic which is designed to collect the core information required to answer the research question (Hennink, Hutter and Bailey 2011: 113). Probes may be used to gain detailed information. Interviews were scheduled at a time that was convenient to participants and so as not to interfere with their work and these were conducted in the community at the sites where they offer the services.

4.9.1 Inclusion criteria

- Consenting CCGs who were trained in community based nutritional assessment.
- CCGs employed by the eThekweni Municipality and Provincial Department of Health.
- CCGs in North area six.

4.9.2 Exclusion criteria

- CCGs who were not trained in community based nutritional assessment.
- CCGs not employed in North area six.

4.10 DATA ANALYSIS

According to Polit and Beck (2012: 556), the purpose of data analysis is to organize data that the researcher has collected, provide structure and elicit meaning from it. In this study, data were analyzed using content analysis. Content analysis is designed to analyze and interpret data by classifying the words in text into categories in order to give it meaning. The researcher grouped the repeated ideas or patterns of thought by organizing data into categories and concepts that the researcher had created (Grove, Burns and Gray 2013: 281). Content analysis uses three stages to analyze the data namely description, analysis and interpretation.

4.10.1 Description phase

In this phase, the researcher listened and re-listened to the audio taped data in order to understand data before transcribing it. Data was transcribed verbatim in the language that data was obtained in; data that was collected in vernacular language was translated into English by a qualified language practitioner. Thereafter, the researcher read and re-read notes and transcripts, listened to recordings until the researcher became immersed in the data which was the researcher's preparation process of making sense of data and familiarizing herself with it in order to dwell with the data collected (Grove, Burns and Grey 2013: 280-281).

4.10.2 Analyzing and organization phase

The researcher carefully read the transcripts line by line, apply paraphrasing or a label or 'code' that describes what they have interpreted in the passage as important (Gale *et al.* 2013: 4-8). According to Grove, Burns and Gray (2013: 281) coding is when the data collected is given codes, which means the researcher will name and label data according to his/her created categories. Through this process of coding the researcher explores the phenomenon of the study. This process should reflect the philosophical basis of the study. As the data analysis proceeds the codes may be merged and relabelled at a

higher level of abstraction and placed into categories. Themes were identified from the established patterns (Grove, Burns and Gray 2013: 281).

4.10.3 Interpretation phase

The data was interpreted by the researcher using categories, themes and sub-themes identified during the organization and analysis phase. Qualitative content analysis initially deals with categorization of demonstrated content, for instance, what the text says. According to Grove, Burns and Gray (2013:280), interpretation is an activity that happens in the mind of the reader. It is the process of reorganizing, combining words and actions of the participants to give sense in order for readers and end users to understand it (Grove, Burns and Gray 2013: 280).

4.11 TRUSTWORTHINESS

There are four suggested criteria for determining trustworthiness of qualitative data, namely: credibility, dependability, conformability and transferability (developed by Lincoln and Guba in 1995 and cited by Polit and Beck 2012:584). The aim of trustworthiness in qualitative study is to support and raise significant arguments so that the study is recognized and regarded as worth paying attention to by the reader (Polit and Beck 2012:280).

4.11.1 Credibility

Successful credibility is when the researcher ensures that the information from participants is identified and described correctly (Grove, Burns and Gray 2013: 280). Credibility was ensured through data triangulation which was achieved by interviewing participants from different types of households in North area six. The same interview guide was used throughout the study. Member check was conducted whereby the researcher returned back to provide the feedback to participants regarding the responses of the interviews. According to Lincoln and Guba in Polit and Beck (2012: 584), member checking is the most important technique for establishing credibility of qualitative data.

4.11.2 Dependability

According to Brink, Van der Walt and Van Rensburg (2012:173), dependability is the provision of evidence. The researcher developed an audit trail where all original records of direct personal interviews and discussions were kept on a disc. This disc and all original written and summarized interviews and those translated into another language and all correspondence regarding the study will be kept under lock and key for five years, so that it can be produced should it become necessary.

4.11.3 Confirmability

Confirmability is the data is fair, true and objective. This is attained through agreement between two or more self-governing people about the data exactness and its accuracy, relevancy or meaning (Polit and Beck 2012: 585). This path of audit trail by means of peer debriefing confirms that the data is accurate and represents the participant's information exactly as it is provided. The researcher interpreted the data by use of direct quotes from the recorded audit in order to eliminate subjectivity and bias to the study.

4.11.4 Transferability

Transferability refers to the potential for extrapolation, that is the extent to which findings can be transferred to or have applicability in other settings or groups (Polit and Beck 2012: 585). The researcher met this criterion by providing a clear explanation of the limitations of the study, giving clear descriptions of the study context, setting and research process to enable the reader to establish the transferability of the results.

4.12 ETHICAL CONSIDERATIONS

Ethical clearance was sought from the Durban University of Technology Institutional Research Committee (REC141/15) (Appendix 1). A request for permission to conduct the study was sought and granted by the eThekweni Municipality Health Research Unit (Appendices 2a and 2b), District Health Manager (Appendices 3a and 3b) and KZN Department of Health (Appendices 4a and 4b). The researcher outlined the purpose and the process of the study to the participants (Appendices 5a and 5b). Thereafter, the researcher requested all the participants to sign a consent form. The study participants were given a choice to participate or not without any coercion and also to withdraw from the study at any point if they wished to do so. The researcher requested permission from the participants to use a recording device to record the interview. Participants were identified by codes to maintain confidentiality. The final dissertation has been edited by the professional editor (Appendix 7). The completed data collection material will be kept under lock and key for a minimum of five years, after which they will be destroyed by shredding by the researcher. Electronically stored data will be kept in a password protected computer and will be deleted after five years by the researcher.

4.13 SUMMARY OF THE CHAPTER

This chapter outlined all the phases undertaken during data collection and data analysis. The next chapter will focus on presentation of the results of the study.

CHAPTER 5 : PRESENTATION OF RESULTS

5.1 INTRODUCTION

This chapter presents the results of data obtained from semi-structured individual face to face interviews with the CCGs. The aim of the study was to explore and describe the experiences of CCGs in the assessment of malnutrition in children under 5 years of age. The organization of the results is aligned with Pender's health promotion model that guided the study. This study used only five of the 12 elements of the framework.

5.2 DEMOGRAPHIC DATA OF THE PARTICIPANTS

Semi-structured individual face to face interviews were conducted with 13 participants, two were males and 11 were females. All participants were isiZulu speakers and their ages ranged between 24 and 58. Both males and two females had Grade 12 as their highest level of education. One female had grade 11 and was still awaiting grade 12 results. The rest of the females had basic education ranging from Grade 6 to Grade 10. Three females were married, eight females and both males were single. All participants were trained to assess malnutrition in children under 5 years in the communities using MUAC. According to participants there was no criteria for selection of MUAC training as long they were registered as CCGs (Table 5.1).

Table 5.1: Demographic data of the participants

Participant	Age in years	Gender	Marital status	Level of education	Incentive
01	32	Male	Single	Grade 12	Stipend
02	44	Female	Single	Grade 10	Stipend
03	55	Female	Married	Grade 6	Stipend
04	43	Female	Married	Grade 8	Stipend
05	40	Female	Single	Grade 6	Stipend
06	28	Male	Single	Grade 12	Stipend
07	24	Female	Single	Grade 12	Stipend
08	58	Female	Widow	Grade 7	Stipend
09	25	Female	single	Grade 11	Stipend
10	30	Female	Single	Grade 10	Stipend
11	53	Female	Widow	Grade 8	Stipend
12	49	Female	Married	Grade 10	Stipend
13	34	Female	Single	Grade 12	Stipend

Interviews were conducted in communities where participants worked. Codes were used to identify areas and communities where interviews were conducted in order to maintain confidentiality. In community A, three interviews were conducted and three in community B. In community C, two interviews were conducted; three in community D and two in community E. A total of 13 participants took part in the study (Table 5.2). The researcher was guided by the data saturation principle during data collection.

Table 5.2: Number of interviews conducted

Communities	Interviews conducted
CA	3
CB	3
CC	2
CD	3
CE	2
	13

5.3 PRESENTATION OF THE FINDINGS

Five major themes and sub-themes emerged and were aligned with elements of Pender's Health Promotion Model (Table 5.3).

Table 5.3: Elements, themes and sub-themes

ELEMENT	THEME	SUB-THEME
Individual characteristics and experiences.	Training of CCGs.	<ul style="list-style-type: none">• Inadequate MUAC training.• Lack of skill and knowledge.• Children living with grandmothers.• Task shifting beyond the CCG's level of training.
Behaviour specific cognitions and affect.	Support and supervision.	<ul style="list-style-type: none">• Lack of support and supervision.
Perceived barriers to action.	Remuneration.	<ul style="list-style-type: none">• Stipend.• Renewal of contracts.• Peer pressure on younger CCGs.
Immediate competing demands and preferences.	Non prioritization of MUAC.	<ul style="list-style-type: none">• Increased workload for the CCGs.• Shortage of the CCGs in the community.
Situational influences.	Safety and security of CCGs on home visits.	<ul style="list-style-type: none">• High level of alcohol consumption in the community.• Long walking distances for both CCGs and community.• Perceived attitudes of community towards CCGs

5.4 INDIVIDUAL CHARACTERISTICS AND EXPERIENCES

Each person has unique personal characteristics and experiences that affect subsequent actions and the importance of their effect depends on the target behaviour being considered (Pender *et al.* 2006: 51). These characteristics and experiences of CCGs may either affect them negatively or positively and might have the same effect on their work.

5.4.1 Theme1: Training of CCGs

Four sub-themes emerged from the theme on training of CCGs namely: inadequate training, lack of skill and knowledge, children living with grandmothers, task shifting beyond CCGs level of training. Participants perceived that these were the reasons for not being able to assess malnutrition in children under 5 years of age.

5.4.1.1 Inadequate MUAC training

Participants perceived their low level of training as one of the factors that affected them negatively with communities looking down upon them. They reported that they felt embarrassed when people asked them health related questions which they could not answer confidently and communities started losing trust in them. Participants also perceived that lack of capacity was also the factor that made them unable to identify malnutrition in children under 5 years. Their experiences are expressed in the following quotes:

“I personally feel that more MUAC training must be conducted for all CCGs so that we are able to teach the communities on how to recognize a child who is developing malnutrition and also teach grand-mothers on child feeding, as they are the ones who stay with these children.” [Participant 5]

“I performed MUAC on a child during a home visit and I did not refer the child, according to my observation the child was not malnourished, on the following week the child was taken to the clinic for other reasons and was found having early signs of malnutrition.” [Participant 09]

“If we can be trained and become community nurses one day so that communities have that confidence in us and become aware that we are there to promote health.” [Participant 8]

“I recommend that we get trained more in assessment of malnutrition because after MUAC assessment and referral there is more I can do if I am

trained like application of medicine on the sores, because most malnourished children have sores.” [Participant 03]

“I feel that we should be accompanied by nurses to measure MUAC in communities as there are many things we do not understand in malnutrition assessment.” [Participant 08]

5.4.1.2 Lack of skill and knowledge

Participants felt that they lacked skills and knowledge in the assessment of malnutrition in children under 5 years of age. They mentioned that communities and nursing staff lacked confidence in them performing MUAC in children. Participants reported that they had no understanding of what the benefits of malnutrition assessment would be in children under 5 years, therefore they were not motivated to partake in performing MUAC. Their experiences were expressed in the following quotes:

“I performed MUAC on a child of 18 months old, according to the MUAC reading the child was not malnourished, on the following day the child was taken to the clinic because she had diarrhoea, at the clinic the nurse assessed the child for malnutrition and I am told by the child’s mother that the child was found to be malnourished.” [Participant 4]

“I accompanied the child with severe malnutrition to the clinic and the nurse asked me why the child was not assessed for malnutrition and discovered before becoming severe malnourished.” [Participant 06]

“One day, I accompanied the mother and her child to the clinic. I was not sure if the child had signs of malnutrition or not and I asked the nurse to assess the child and she told me that I was also trained in assessing malnutrition on children.” [Participant 05]

“On the other day, I observed the professional nurse measuring MUAC on the child’s arm and I discovered that I was measuring MUAC incorrectly. As

CCGs, we need help from skilled health care professional to polish our MUAC skills.” [Participant 02]

“Malnutrition assessment is not only focused on MUAC measurement, there are also signs of moderate acute malnutrition and severe acute malnutrition which I feel as CCGs we needed more knowledge on.” [Participant 06]

5.4.1.3 Children living with grandmothers

Participants perceived MUAC as not being an easy task to perform and found this to be a contributory factor towards poor performance of assessing malnutrition in children under 5 years of age in communities. Participants lamented about difficulties they experienced during the process of doing MUAC. They verbalized that it was not an easy task as most children lived with grandmothers and it was difficult to hold the child and sometimes they did not take these children to the clinic. They said that if the grandmother was alone at home with the child they chose not to do MUAC as it would be difficult to hold a child that is crying and wriggling. This was expressed by the participants in the following quotes:

“Sometimes it becomes very difficult to assess child’s malnutrition where the grandmother is very old and alone, the child’s immunization card is not available and the child is crying and running away.” [Participant 13]

“I could not measure MUAC on a child of 4years old, he was crying and wriggling, yet there was grandmother alone at home.” [Participant 01]

“On home visit I was measuring MUAC and ended up not reading the results, the child was crying loudly thinking I was giving injection yet there was no one helping to hold child, the child lived with grandmother.” [Participant 06]

“The grandmother got angry when the child cried when measuring MUAC; she did not understand and said the child had no signs of illness why was the child made to cry?” [Participant 04]

5.4.1.4 Task shifting beyond their level of training

Participants perceived MUAC under 5 years was a task that was supposed to be performed by the nursing staff. Their dissatisfaction was expressed as follows:

“I felt the assessment of malnutrition in children under 5 years was a difficult task to understand in terms of the level of the CCGs. It was not supposed to be performed by the CCGs as some of us have low level of basic school education.” [Participant 07]

“There was information which I did not understand in the process of training, if I asked my colleagues they did not answer me confidently and I felt this task was beyond our level as the training was conducted in English.” [Participant 01]

“This task was supposed to be done by the nurses, who would understand all that pertain to assessment of malnutrition in a child and let the CCGs talk about feeding practices and healthy diet.” [Participant 10]

“There is a lot to do in MUAC. It is not only reading of colours on the belt but also to check for other signs of malnutrition. This should be done by nurses and not CCGs because we have other work to do like bathing and feeding patients left alone in their homes.” [Participant 10]

5.5 BEHAVIOUR SPECIFIC COGNITIONS AND AFFECT

Behaviour specific cognition variables are considered to have major motivational significance, thus these variables constitute a critical core for intervention, because they are subject to influence changes in commitment

(Pender *et al.* 2006: 52). If CCGs are unsure of how the MUAC procedure is done, or the significance of malnutrition assessment in children under 5 years is unknown, this might affect their work of assessing malnutrition.

5.5.1 Theme 2: Support and supervision

Participants perceived that there was no support given to them, neither from the Thekwini district nor clinics they are affiliated to. They described their experiences as being neglected by the Department of Health (DoH) as they were not followed or asked about challenges they experienced in the communities. Participants verbalized that they expected regular support visits for mentorship from skilled health care professionals to strengthen their performance in assessing malnutrition in children under 5 years. The subtheme was lack of support and supervision from skilled health care professionals.

5.5.1.1 Lack of support and supervision

Participants reported that they lacked support and supervision on assessment of malnutrition in children under 5 years. Each team of CCGs is expected to formulate a Philamntwana site meaning healthy child site in their area, where they would monitor the child's growth until 5 years and refer any deviation to the clinic yet there is no support on how this should be done and checking whether the CCGs are doing it correctly. These views were expressed in the following quotes:

“As far as supervision is concerned, we have no supervisor; no one follows and gives us support.” [Participant 12]

“Since we started performing MUAC in communities, we were advised to report challenges to the clinics but we are getting no support and supervision either from clinics or any other health department.” [Participant 04]

“We needed to be allocated a skilled health care professional who would be our mentor to support and supervise us in assessing malnutrition on children under 5 years.” [Participants 01]

“As far as support and supervision is concerned, we do not have support and supervision. One day, I did MUAC on the child and I could not identify that the child was malnourished because she looked healthy. On the following day, the child’s mother took the child to clinic and she was told that her child was malnourished.” [Participant 12]

“Since we started performing MUAC in communities, we were advised to report challenges to the clinics but we are getting no support. I reported three children that had signs of malnutrition in my area whose parents did not have money to go to the clinic and I expected the clinic to take action, but nothing was done. I ended up giving money to the mother of the sick child so that she could take her to the clinic.” [Participant 04]

“The nurses in the clinic do not give us the necessary support and supervision. I was in the clinic and the nurse informed me that she discovered a child with malnutrition. She asked me why I did not assess the child for malnutrition because I was trained. I expected her to teach and guide me on what she discovered on the child.” [Participant 05]

“The Department of Health needs to employ supervisors to support the CCGs when performing MUAC on children under 5 years. We have one supervisor who is also a CCG and she becomes frustrated if we report to her the problems that are beyond her level of training.” [Participant 02]

“I could not do MUAC on a one year eleven months old child. The child had signs of being disabled and the mother did not take the child to the clinic since the child was born. I did not know what to do. I felt I needed to report the child’s condition to the supervisor.” [Participant 07]

5.6 PERCEIVED BARRIERS TO ACTION

Barriers may be imagined or real, they consist of perceptions concerning the unavailability, inconvenience, expense, difficulty or time consuming nature of a particular action. Barriers are often viewed as mental blocks, hurdles and personal cost of undertaking a given behaviour (Pender *et al.* 2006: 53). The CCG's remuneration is still funded by an NPO, which means that their remuneration is unstable due to signing on and off of contracts and that might cause their behaviour to be negative and children not being assessed for malnutrition.

5.6.1 Theme 3: Remuneration

Participants reported that they were not motivated to perform MUAC due to the unfixed system of remuneration. Participants verbalized that they initially joined the CCG programme with an intention of getting experience to obtain better job opportunities. They felt there should be increment that was added specifically for the performance of MUAC. This programme was added to all other work they do for example giving Vitamin A, TB Direct Observe Treatment Strategy (DOTS), TB and Antiretroviral treatment (ART) defaulter tracing yet they received only the little stipend. Participants felt that MUAC was too tedious with children crying and wriggling making it hard to measure. They felt it would help if there was additional money specifically for the assessment of malnutrition on children under 5 years of age. Sub-themes were stipend and renewal of contracts.

5.6.1.1 Stipend

Participants perceived the stipend as bus or taxi fair to go to their work areas, but they were taken as if they were employed. They expressed their feelings this way:

“I do not get additional money from the government for assessing malnutrition in children under 5 years. This stipend is too little and it does not

increase but government added work and communities out there are not easy to deal with.” [Participant 09]

“I cannot pay for my private studies from the stipend, it gets finished before I think of what to do with it. It is so little.” [Participant 04]

“I accompanied the mother and her child to the Social Workers and I paid taxi fare from my pocket as the mother did not have money.” [Participant 06]

5.6.1.2 Renewal of contracts

Participants described their experiences about renewal of contracts. The CCGs’ remuneration is still funded by NPOs, which means that their contracts are unstable due to the signing of their contracts which is on and off. They verbalized different experiences concerning the renewal of their contracts, participants felt unhappy and dissatisfied about the funding NPO. Participants described their experiences in the following excerpts:

“There was a time when I worked as a volunteer for six months because my contract had not been renewed and no one from the Department of Health came and explained to us what had happened during that period, what was the reason for contracts not to be renewed.” [Participant 05]

“I went to the bank on pay day and when I tried to withdraw money, I discovered that I had not been paid. I phoned my colleague to ask if she got paid, she informed that she had also not received her stipend. We only got paid on the second week of the second month.” [Participant 09]

“The renewal of contracts is a nightmare; you cannot guarantee that your contract will be renewed until it is done. Mine was not renewed for two months and I did not get an explanation. It was renewed on the third month after everyone else’s was renewed.” [Participant 02]

5.6.1.3 Peer pressure on younger CCGs

Participants especially the younger CCGs verbalized that they experienced pressure from their peers due to the nature of work they do. According to these participants they felt undermined by their peers. They expressed their feelings of this way:

“I met with a lady with whom I attended the same school, because of work I am doing I felt she looked down upon me and she has a better job.” [Participant 05]

“I am looking for a better job because I sometimes do not feel great working as CCG being a young male.” [Participant07]

“Two boys greeted me but they did not address me by my name but they addressed me as a CCG.” [Participant10]

“I feel we should have work uniform like nurses so that we can have dignity in the community.” [Participant 02]

“I thought to be a CCG was a starting point to get a better job.” [Participant 01]

“One lady asked me if I bath patients at their homes.” [Participant 02]

5.7 IMMEDIATE COMPETING DEMANDS AND PREFERENCES

Competing demands are viewed as alternative behaviours over which individuals have a relatively low level of control because of environmental contingencies such as work or family responsibilities (Pender *et al.* 2006: 56). If the CCG has another commitment either in the family, such as a small baby or other work in the community, this might dilute the focus of assessing malnutrition in children under5 years of age.

5.7.1 Theme 4: Non-prioritization of MUAC

All participants similarly reported that they were having a lot of other commitments in the community which they felt were more important than MUAC because these children were not sick. They mentioned that time for MUAC was too little. Sub-themes which emerged from the theme were: increased workload and the shortage of the CCGs in the community.

5.7.1.1 Increased workload for CCGs

Participants felt that their workload was increased in the communities caused by the pandemic of HIV/AIDS. They expressed their experiences in the following quotes:

“I had four patients for daily home visits in my area. All of them were on TB and ART treatment and I had to ensure that they were taking their treatment properly, two were for morning visit and two were for afternoon visit. I did not perform MUAC until my patients got discharged from TB treatment.”
[Participant 04]

“I had a very sick patient in my area that had no one to help her. Every day I did home visits only to her house because I need to bath and feed her, I could not do MUAC.” [Participant 13]

“I did not have time for MUAC performance. My patient’s house was demolished by a storm and I had to accompany her to the Ward Councillor until she was allocated the house to stay in.” [Participant 05]

“I had four TB patients on DOTS in my area and one them was alcoholic, he did not want to take his treatment if I was not present, I did not have time for MUAC until the TB patients were discharged.” [Participant01]

5.7.1.2 Shortage of CCGs in the community

Participants reported that there was drastic shortage of CCGs in the community that made them unable to perform MUAC to their satisfaction. They all perceived more CCGs should have been employed after some of their colleagues were sent for career development. Their concerns were described in the following excerpts:

“My teammate was selected for nurse training and all patients that she looked after became mine and it was very hard especially with TB defaulters, sometimes I end up not going for MUAC in children.” [Participant 09]

“I have three children who take ARV treatment and I pay more attention to those children than others and perform MUAC on them only because of staff shortage.” [Participant 02]

“I went on home visit with an intention of doing MUAC on children, I started to check on my other patient who was not at home on the other day, when I was there I found her in bed and sick. I had to make porridge for her, I did not continue for MUAC.” [Participant 04]

5.8 SITUATIONAL INFLUENCES

Individuals are drawn to and perform more competently in situations or environmental contexts in which they feel compatible than incompatible (Pender *et al.* 2006). If CCGs are not accepted where they are doing their home visits or they feel threatened, this affects the way they perform their job.

5.8.1 Theme 5: Safety and security of CCGs on home visits

Participants were concerned for their safety and security in the communities since they work in dangerous areas. They reported high levels of women and child abuse in informal settlements. Participants reported that there were some areas they felt threatened when conducting home visits, sometimes

they walk long distances. The subtheme was high level of alcohol consumption in communities.

5.8.1.1 High level of alcohol consumption in the community

Participants reported high level of alcohol consumption in informal settlements. Communities drink alcohol seven days a week and they use abusive language. All participants reported that they work in threatening situations every day where their safety was not guaranteed and their lives were in danger. They verbalized that there were areas where they chose not to visit. Participants expressed their fears in the following excerpts:

“We did a home visit and we found the couple drunk and not looking after the 3 year old child, they began using abusive language towards each other until we decided to leave.” [Participant 04]

“There was a lady whose child was taken away by the social workers because she was always under the influence of alcohol, whenever I pass her house she comes out and use abusive language towards me, she wanted her child back until I decided not do home visits in that area.” [Participant 06]

“There was a home I visited in the area I work in, three children lived with their father, two girls and one boy the eldest of the three was 8 years old. First I found them alone their father was at work. Their mother had died two years ago. On the following visit I found their father. I refused completely to enter the house with fear for my safety although he was not drunk but I felt unsafe to be alone with him in the house as the rate of women abuse is high in the informal settlements.” [Participant 02]

5.8.1.2 Long walking distances for both CCGs and community

Participants perceived that government needed to increase their stipend because sometimes they use public transport to travel and do MUAC in the communities. They mentioned that they were the areas they could not walk to

because of lack of safety and security. Their experiences were explained in the following quotes:

“We went there with my teammate and we did not do MUAC, the child’s mother told us that she will not be able to take her child to the clinic the clinic was far and she did not have money and it was very dangerous to walk.”
[Participant3]

“Other areas were very far to reach, we needed to use transportation to reach those areas and sometimes we did not have money and after we referred children.” [Participant 11]

“We were at the mobile clinic point and four men came and robbed us of our bags and cell phones and ran away, the mobile clinic was closed for that community.” [Participant 01]

“Sometimes we managed to go and do MUAC in informal settlements and the community told us that the area was very dangerous, they do not have money to take their children to the clinic and they cannot walk to the clinic because of the high rate of crime and we decided to stop going in that area.”
[Participant03]

“While we were waiting for a taxi under the tree, three young men came and asked for our bags, while we were arguing a vehicle stopped and the men in the that vehicle assisted us, that is why we perceived that government should consider our working conditions.” [Participant 08]

“Nurses who work in rural areas get rural allowance but CCGs who work in the same rural areas get nothing.” [Participant 06]

5.8.1.3 Perceived attitudes of the community towards the CCGs

Participants reported that the community had negative attitudes towards MUAC. They verbalized that the community did not show appreciation

towards the CCGs doing MUAC on their children. They mentioned their experiences in the following quotes:

“In one home visit the lady shut the door when she saw me approaching her house and I could not continue doing MUAC on her children because she had shown me that she did not have time for me.” [Participant 10]

“The other lady asked me if I brought porridge for her child or not, if not, I must not waste her time she was in a hurry to go somewhere and I could see on her face that I was not welcome her house.” [Participant 11]

“In another house they told me that children’s parents were unavailable they did not give me the opportunity to do MUAC.” [Participant 05]

“The lady told me that I only talk and identify the sick children, but I did not bring their medication, she did not have money to take to the clinic.” [Participant 09]

5.9 SUMMARY OF THE CHAPTER

In this chapter, the findings of data analysis were presented. Based on the findings of this study, malnutrition in children under 5years is still a problem. These results will be further discussed in the next chapter which is Chapter 6 where the results will be supported with relevant literature that will help to improve assessment of malnutrition in children under 5years.

CHAPTER 6 : DISCUSSION OF RESULTS

6.1 INTRODUCTION

The previous chapter focused on the presentation of the study results. The current chapter focuses on the discussion of the study's findings. The discussion is organized based on the study objectives and theoretical framework which guided the study. The discussion of the results will also portray whether the objective of the study was achieved. Relevant literature was used to support the meaning of themes and sub-themes that had been created from data analysis.

6.2 OVERVIEW OF THE RESEARCH DISCUSSION

The aim of the study was to explore and describe experiences of CCGs on the assessment of malnutrition in children under 5 years of age.

Five major themes were identified in this study during the data analysis process, as follows:

Theme 1: Training of the CCGs.

Theme 2: Support and supervision.

Theme 3: Remuneration.

Theme 4: Non-prioritization of MUAC.

Theme 5: Safety and security of CCGs on home visits.

These themes will be contextualized in this chapter using new relevant peer reviewed literature.

6.3 Training of CCGs

The study's findings indicated high levels of dissatisfaction amongst CCGs concerning their training in the assessment of malnutrition in children under 5 years of age which was identified as inadequate. This led to communities rejecting them as they were seen as non-qualified. Majamanda, Maureen, Munkhondia and Carrier (2014: 115) assert that providing nutrition training to

implementers prior to implementation, helps them to demonstrate higher levels of nutrition knowledge and counselling skills which they lack. With shortage of health care workers, it is important to utilize thoroughly trained CCGs to provide nutrition counselling, instead of asking any volunteer to provide nutrition education. Furthermore, to produce highly significant results in nutritional status of the under-5s, there should be group meetings of CCGs and community leaders, providing education at frequent intervals of at least twice a week and using cooking demonstrations in addition to home visiting (Majamanda *et al.* 2014: 115).

Participants reported that they lacked skills and knowledge of malnutrition assessment regardless of the training that they had received. This made nurses and community to lack confidence in CCGs performing MUAC. Lack of understanding during the training process might have been due to low level of basic education of some participants and the unstructured selection criteria for MUAC training. Collins *et al.* (2010: 61) argued that initial selection of CCGs was facilitated by communities in a more participatory approach. However, that could have drawbacks due to the common tendencies of communities to select people related to community leaders even if they were illiterate. These authors further assert that program implementers from the Department of Health and NGOs can identify and recruit CCGs and for that to work, it is important that necessary and appropriate criteria be followed (Collins *et al.* 2010: 61). Folashade *et al.* (2014: 37) emphasize that growth monitoring and promotion of optimal nutrition are essential components of health care for all children. Monitoring a child's nutrition status helps to confirm a child's healthy growth and development. It also identifies early potential nutrition or health problems, hence it is critical to offer malnutrition assessment training to suitable candidates (Folashade *et al.* 2014: 37). Pairing of experienced and inexperienced CCGs could improve the situation. According to Divya *et al.* (2013: 144), the skill and knowledge level of inexperienced personnel can be improved by the information gathered from skilled personnel; this emphasizes the need to promote activities that gather both personnel.

Rejection was reported by participants in the current study. They experienced rejection from communities due to their low level of training in malnutrition assessment in children under 5 years, which affected their work negatively. They stated that they felt undermined by communities. The National Community Health Worker Policy, states that the main objective of the National Strategy to Eliminate Malnutrition (NSEM) was to reduce all forms of malnutrition through implementing a joint plan and strengthening the multi-sectoral approach (Department of Health 2012: 7). Strategies of the NSEM included bolstering early identification and management of under-nutrition and the response to their underlying causes (Department of Health 2012: 7). It also aimed at scaling up community based nutrition programs to prevent and manage malnutrition in children under 5 years of age. According to this policy, CCGs needed more training to gain a buy-in from communities to prevent rejection which results in reoccurrence of malnutrition in this age group (Department of Health 2012: 7).

In findings of the current study, participants reported that most children were living with their grandmothers. Participants perceived that a child living with a grandmother only was a contributory factor to poor performance of MUAC. They verbalized that MUAC was not an easy task to perform as the child would be crying and not wanting to be held down and the grandmother unable to assist. According to Mugode and Michello (2013: 91), existing gaps might be exacerbated by poor nutrition assessment techniques where CCGs did not ensure good arm position when measuring MUAC which could affect accuracy of results (Mugode and Michello 2013: 92).

It was perceived by participants of the current study that the assessment of malnutrition in children under 5 years of age was beyond their level of training. They verbalized that they experienced lots of challenges which they could not understand during the process of their training. Participants reported that the training was conducted in a language which most of them did not understand, namely, English, Ashworth and Ferguson (2009: 427) state that it is widely accepted that the quality of nutrition counselling is often poor, whether it be in

growth monitoring and promotion programs for improving complementary feeding or for community-based rehabilitation. Evidence was accumulating from both malnutrition rehabilitative and preventive programs, that dietary counselling could be effective when done well and could achieve gains in length and weight. The authors further stated that in successful programs, frequent and regular exposure to a few simple uniform age appropriate messages together with an opportunity for interaction between CCGs and the child's mother were found to be important. Competing demands on mother's time requires significant skill and insight but nutrition counselling was often left to minimally trained personnel or even volunteers with poor knowledge and poor communication skills (Ashworth and Ferguson 2009: 427).

The results of this study indicated that MUAC performance in the communities had several advantages, including the fact that MUAC measurement can be conducted quickly and at a small cost. It is a nutritional assessment tool for growth monitoring for children under 5 years of age. After MUAC assessment the malnourished child is introduced to the RUTF program which significantly reduces the amount of time that malnourished children remain under weight compared to malnourished children in the standard care condition. Lesiapeto *et al.* (2010: 206) concurred that after MUAC performance mothers can be educated and provided with more objective ways of knowing whether their children are growing well through the provision of community growth promotion services with education on child growth (Lesiapeto *et al.* 2010: 206). According to Shah *et al.* (2014: 97), since MUAC is inexpensive, is more commonly available, does not require a chart to calculate and is easier to measure, it may be a useful screening tool for malnutrition in children under 5 years of age (Shah *et al.* 2014: 97).

6.4 Support and supervision

Lack of support from CCGs' superiors was experienced across all participants. The study findings indicated that CCGs were not mentored in assessment of children under 5 years. They reported that they experienced hardship when performing MUAC measurement in this age group in terms of

technique. According to Nsibande *et al.* (2013: 6), intensive field supervision of CCGs with weekly contact sessions for mentoring might have increased CCGs' nutritional assessment skill. Ransom and Asaki (2014: 367) argued that South Africa was one of five countries forming the Home Based Care Alliance and had 1395 members. In the Alliance's conference held in 2011, there were no new programs for CCGs, although there were new steps towards re-engineering the public health care system and the National Health Insurance Policy. Furthermore, discussions held at the top levels do not include CCGs who are at the grassroots level and are the implementers of malnutrition assessment (Ransom and Asaki 2014:367).

Inadequate training, support and supervision of community care givers and poor integration of CHBC programmes with the services offered by formal health facilities were some of the reasons cited by the Multi-Country Research: (South Africa Report 2013: 6). Findings of the current study indicated that participants perceived that government was not giving them enough support in the assessment of malnutrition in children under 5 years of age. They verbalized their concerns that government was supposed to employ enough skilled supervisors not to have to select supervisors from among the existing CCGs. They reported that they experienced a lot of challenges in the community which their existing supervisor was unable to resolve because of her lack of skill and knowledge. According to Mlotshwa, Harris, Schneider and Moshabela (2015: 7), CCGs are important for strengthening the health system and improving health service delivery at grassroots level. These authors further stated that given the heavy reliance on CCGs in caring for people in the home environment, the state and NGOs will need to develop innovative ideas in terms of support and supervision of this cadre (Mlotshwa *et al.* 2015: 7).

6.5 Remuneration

It was indicated in the findings of the current study that participants were dissatisfied with the remuneration they were receiving. Participants perceived that they should be given extra incentives specifically for the assessment of

malnutrition in children under 5 years of age. Participants reported that they were operating in highly challenging and stressful circumstances, yet their needs and priorities were being ignored. They indicated that their motivation came from the fact that they are acknowledged and appreciated by government. Participants spoke of the irregular and small stipend they are getting which is not even fulfilling their needs and is unreliable. On some months they were paid and on others not paid. Participants mentioned that they were looking for better job opportunities, since this inadequate stipend did not serve any purpose, instead it demoralized their emotions. These realities compromise the agenda of nutritional assessment of children under 5 years.

According to Thabethe (2011: 790), in her study conducted in KZN, donors are willing to fund organizational events and activities, but are reluctant to invest in staff salaries related to CHBC activities. These assertions reiterate the notion that community care aims to reduce public expenditure on social services, thus privileging one set over another. Government support could assist CCGs to cope better; participants mentioned that they carry the bulk of work from the communities, yet they are not even considered in the stable remuneration process. This necessitates a model of care geared towards addressing the plight of the CCGs. Thabethe recommends that care giving should be valued as a job not as volunteer work. It is critical to integrate the social and economic objectives of any CHBC programme. The CHBC duties should be clearly defined as a measure to provide temporary relief. She further posits that policy makers and development planners should adopt models that are sensitive to the political, social and economic context; this would mean using models that aim to build CCGs' autonomy. The challenges and experiences presented by the CCGs call for a multi-pronged approach to address broader socio-economic conditions. Thabethe (2011: 790) further stated that the government, NPOs and communities should be part of the process of finding solutions, if the under sourced NPOs are left alone to respond to multiple socio-economic challenges, they are likely to offer limited solutions (Thabethe 2011: 790).

The current study findings revealed that participants are dissatisfied with their contract renewal system; they reported that their employment contract period was short and unstable. Participants reported that their contract renewals are also unreliable as sometimes they are not renewed when they are expected to be renewed, and their pay dates are also unstable, sometimes there are delays with payments, and these delays greatly inconvenience participants. Magingxa, Masuku and Ngubo (2011: 7) produced a follow up document from the Community Care Worker Policy Management Framework which had been produced in 2009 by the Department of Health and Department of Social Development. This follow up document suggested that the rapid growth in numbers of lay health workers and existing management models had produced unfortunate consequences both for care workers and associate NPOs. Particular problems identified were interruptions in the flow of funding from government sources to CHBC workers via partnering NPOs and the persistence of fragmented programme-specific approaches to service delivery instead of integrated, comprehensive approaches (Magingxa *et al.* 2011: 7). The DoH Motivation Letter (2016: 2), states that in the current year 2016, the motivation for the extension of the employment contracts renewal was negotiated. The motivation included the following: CCGs and supervisors are an extension of the health services and provide the link between communities and the health facilities. They are the backbone of Operation Sukuma Sakhe as they initiate intervention through household profiling. The department has received numerous complaints from CCGs and supervisors regarding the length of their contracts. The proposal is that the contract period be extended from the current 12 months to 24 months. This will enable the CCGs and supervisors to plan and stabilize their living conditions. The commencement of the renewal of the contracts will be implemented in February 2016 to minimize the delays in the payment of stipends with effect from April 2016. District must conduct an audit of the performance and conduct of all CCGs and Supervisors prior to extension/renewal of contracts. This will ensure that all eligible candidates are considered for renewal of contracts. The personnel target for the two financial years 2016/17/18 is 9 777 for both CCGs and Supervisors covering households. It is proposed that contracts are renewed

every two financial years and be funded through the Conditional Grant HIV/AIDS Care and Support and the Social Sector Incentive Grant (Department of Health 2016: 2).

Findings of the current study revealed that participants engaged themselves in CHBC activities with the hope and intention of acquiring work experience to secure better jobs. Their views indicated that their motivation and strength came from being acknowledged and appreciated for the work they do and for being rewarded with employment by the government. According to Mkandawire, and Muula (2010: 23), young people working as CCGs were motivated by the novelty of the program, prospects of employment after having experience and desire to not spend time idle (Mkandawire and Muula 2010: 23).

In findings of the current study, participants who were younger reported that they were being looked down upon by their peers in the communities due to the work they do. The findings revealed that these participants succumbed to peer pressure when interacting with their peers in communities. Mlotshwa *et al.* (2015: 7) assert that the work of CCGs was motivated by the fact that they came from impoverished communities with little access to employment and other work opportunities. As participants described their interaction with different community members, it was clear that identifying as an ordinary community member was not always possible. The authors contend that CCGs provision of services for patients within their communities is influenced by how they view themselves and how they think society perceives them (Mlotshwa *et al.* 2015: 6).

6.6 Non-prioritization of MUAC

It was indicated in the current study that participants had lots of other work commitments in the community that compromised the assessment of malnutrition in children under 5 years. Participants reported that since there was a burden of HIV/AIDS and TB, their workload had increased. They were doing DOTS on patients who were on TB treatment, tracing patients who

defaulted on their TB and ART, giving Vitamin A drops to children and joining campaigns in the community. They verbalized that they also visited very ill patients and assisted them with bathing, accompanying them to Home Affairs for grant applications and to the Social Worker. MUAC assessment came last or was never performed. According to Mlotshwa *et al.* (2015: 8) there is a need for further efforts by government to nurture a sense of belonging for this cadre so that they understand how young children within their communities need their assistance as a priority (Mlotshwa *et al.* 2015: 8).

Participants also reported that there was drastic shortage of CCGs in the community, saying that there were many CCG vacancies which were not filled by government. As an example of this they said that CCGs who were selected for nurse training were not replaced and their work areas were attended by the remaining CCGs whose numbers had been depleted. They verbalized their concerns that assessment of malnutrition in children under 5 years was implemented without consideration of shortage of CCGs in the community. According to Connor and Manary (2011: 983), the implication for MUAC practice in communities will have to be reviewed in future, taking into account the immediate local contexts and programming. The more people that are reached, the more children will be saved and the closer we will come to winning the monumental fight against malnutrition and its lifelong effects on children under 5 years (Connor and Manary 2011: 983).

6.7 Safety and security of CCGs during home visits

In the current study the findings indicated that participants were all concerned about their safety and security in the communities they worked. Participants reported that alcohol consumption was very high in the community and once people were under the influence of alcohol they used abusive language either towards each other in the presence of CCGs or towards CCGs. Participants perceived that those threatening situations in some communities contributed to MUAC not being performed in those areas. According to Mlotshwa *et al.* (2015: 7), as the health system continues to integrate CCGs formally in South Africa, it is central that they acknowledge the perspective of care given by

CCGs according to their personal experiences. Participants also reported that they walked long distances to reach communities and it is because of these long distances that the community did not take their children to clinics after referral. According to Nkonki, Chopra, Doherty, Jackson and Robberstad (2011: 11), the majority of unemployed and the most of the poor population reside in informal settlements and rural sites which are known as hard to reach areas. It could be geographical distance or dangerous conditions. The South African government should consider geographical targeting for future health service provision programmes (Nkonki *et al.* 2011: 11).

6.8 SUMMARY OF THE CHAPTER

In the results of this study malnutrition assessment in children under 5 years still remains problematic in the communities. There is a lack of skill and knowledge in the assessment of malnutrition using MUAC. There were high levels of dissatisfaction regarding MUAC training support and supervision provided to CCGs by skilled health professionals.

CHAPTER 7 : LIMITATIONS, CONCLUSION AND RECOMMENDATIONS

7.1 INTRODUCTION

The previous chapter presented the discussion of findings for the current study. This chapter presents the summary of the findings, limitations of the study, conclusion and recommendations.

7.2 SUMMARY OF FINDINGS

Findings of the current study indicated that participants engaged themselves in the CCG program with an intention to obtain the experience of job opportunities. Their dissatisfaction with their remuneration emerged very clearly from the data analysis. Participants mentioned that they had high workloads in the communities, yet their stipend did not increase and it was unstable. Community care givers working in more rural or deep rural areas have to walk long distances between households over difficult terrain. There was a shortage of CCGs, which resulted in them working in more areas or wards other than their own. Household members were not always at home at the time of CCGs' visit, which effectively meant that CCGs have to repeat home visits on the following day instead of visiting another home. Community care givers had to multitask as they were expected to do DOTS, tracing of TB and ART defaulters, as well as caring for very ill patients at their homes, giving Vitamin A to children under 5 years and joining the campaigns in the communities. The current study findings revealed that perceived negative attitudes of communities towards CCGs was one of the contributory factors that compromised MUAC in the community.

7.3 LIMITATIONS OF THE STUDY

The study was conducted on CCGs who were trained on assessing malnutrition in children under 5 years of age using MUAC and excluded those who were untrained and volunteers. The study was conducted in North area six only, other areas were excluded.

Community care givers are not an easy group to reach because they are always in the field and they do not have a specific start and finish time. They choose the time that they know they will find someone in the home they were visiting which was morning or afternoon and they do not work at the same place every day. They work in rural and semi-rural areas and the researcher had to conduct the interviews in the morning because she would be unable to obtain good data in the afternoon because they would be so exhausted due to extreme weather conditions especially heat and the long distance they walk.

Some CCGs refused to participate or withdrew from the study so not all CCGs available for the study.

7.4 RECOMMENDATIONS

The following recommendations are presented to address gaps that were identified by the study:

- Selection for training of CCGs for assessment of malnutrition in children under5 years in the communities should be based on the level of basic school education of CCG from grade 7 upwards.
- Educating CCGs on the rationale of malnutrition assessment of children under5 years in the communities so that they have insight into what they are doing.
- CCGs have multiple roles and may need to prioritize which is more important; this is not easy and will require specific guidance and training from skilled health professionals.
- It is clear that expression of confidence in CCGs is important from all role players and may be key to acceptability of CCGs during home visits. Such confidence is related to training, skills and competencies of the CCGs, so it is important that CCGs are given the required skills for the

implementation of the assessment of malnutrition in children under 5 years.

- A formal evaluation of knowledge and skills of CCGs to undertake the assessment of malnutrition in children after completion of training is required, to ensure that CCGs have the skills to implement the program effectively.
- Strengthening of support and supervision in malnutrition assessment in children under 5 years in the communities by conducting frequent monitoring and evaluation of the program by skilled health professionals such as nutritionists and personnel from the Department of Health and Non-governmental organizations.
- Issuing of Vitamin A in children by the CCGs in the communities should be reviewed. Children default on their vaccines because caregivers do not see the need to take the child to the clinic once they had been given something even if it was not immunization.
- Philamntwana sites had already been suggested and implemented in communities. It is recommended that Maternal, Child and Women's Health nurses should assist in visiting these sites frequently to identify malnourished children and educate CCGs.
- It is likely that as CCGs become more important to the health system and fulfil a stronger role, more job security, clear career path and improved pay and conditions should be considered by the policy makers when planning programme involving CCGs.

7.5 FURTHER RESEACH

- A further in-depth qualitative study should be undertaken to understand the relationship between the CCGs and community members being visited.

- A further exploratory in-depth qualitative study should be undertaken to identify attitudes of health care providers in clinics towards CCGs.

7.6 SUMMARY OF THE CHAPTER

The current study findings indicated that there were no criteria for the selection of CCGs for training for the assessment of malnutrition in children under 5years. The current study findings indicated that some participants lack skill and knowledge due to their low level of school education, which was their basic education, yet they were the CCGs that were committed to their work in the communities. Participants reported that they had many other work commitments in the communities that might compromise the assessment of malnutrition in children under 5years. The study findings also indicated that there was lack of support and supervision as well as monitoring and evaluation of the program in terms of Quality Assurance and Improvement. The study findings also indicated that there was a lack of awareness about the importance of malnutrition assessment in the communities.

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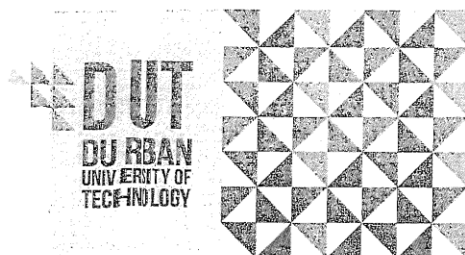
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APPENDICES

Appendix 1: University ethics clearance



Institutional Research Ethics Committee
Faculty of Health Sciences
Room MS 49, Mansfield School Site
Gate 8, Ritson Campus
Durban University of Technology

P O Box 1334, Durban, South Africa, 4001

Tel: 031 373 2900
Fax: 031 373 2407
Email: lavishad@dut.ac.za
http://www.dut.ac.za/research/institutional_research_ethics

www.dut.ac.za

Appendix 1:

2 February 2016

IREC Reference Number: **REC 141/15**

Ms P G Ndlovu
P O Box 560
Tongaat
4399

Dear Ms Ndlovu

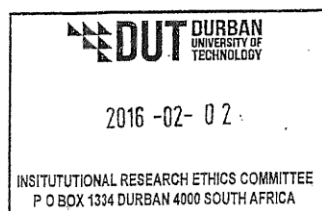
Experiences of community care givers in nutritional assessment of children under 5 years in eThekweni District

The Institutional Research Ethics Committee acknowledges receipt of your gatekeeper permission letters.

Please note that FULL APPROVAL is granted to your research proposal. You may proceed with data collection.

Yours Sincerely,

Professor J. R. M. M. M.
Chairperson: IREC



Appendix 2a: Permission letter to the Head of Health Unit at eThekweni Municipality

P. O. Box 560
Tongaat
4399

The Head of Health
9 Archie Gumede Place
Durban
4000

REQUEST FOR PERMISSION TO CONDUCT A STUDY WITH THE COMMUNITY CARE GIVERS

I am the Nursing Services Manager at Hambanathi Primary Health Care clinic in the North Sub-District. I am a Master's student at the Durban University of Technology. I would like to conduct a study: Title: *Experiences of community care givers in nutritional assessment of children under 5 years in eThekweni District*.

The aim of the study is to determine the cause of malnutrition in children under five years, and also to describe the experiences of the community care givers on nutritional assessment in this age group. Interview with CCGs will take about 20 to 30 minutes. Participation will be voluntary. Anonymity and confidentiality will be maintained at all times. The study might benefit the community by reducing malnutrition in children under five years. The policy makers might use the study in formulation of the health policies. On completion of the study, the copy will be available to you. Please find enclosed copies of the summary of proposal, interview guide, and the university ethics clearance.

For further information: the research supervisor: Ms Dudu Sokhela: 031-3732292.

Sincerely,

.....

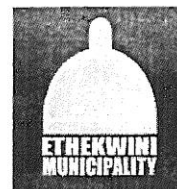
Ms G.B. Ndlovu

Email: pretty.ndlovu@durban.gov.za

Cell No: 076-782 1423

Appendix 2b: Approval letter from the Head of Health Unit

Appendix 2b:



Dear P Ndlovu

20 January 2016

Subject: Approval of a research proposal.

The research proposal titled: **Experience of community care givers in nutritional assessment of children under 5 years in eThekweni District** was reviewed by the eThekweni Municipal Health Department research Committee. The study is hereby **approved to be conducted at Redcliffe, Waterloo, Verulam and Trenance Park clinics.**

The following conditions need to be noted:

- Submission of the indemnity form obtainable from the eThekweni Municipality Health Unit before commencement of the study.
- Prior arrangements to be made with the facility and an assurance that all services will not be disrupted.
- No staff member should be used for collecting data for the researchers.
- Progress reports to be provided and the final report of the study to the eThekweni Municipality Health Unit or emailed to: **ntombifuthi.mangeni@durban.gov.za** and Cc: **grace.mufamadi@durban.gov.za**
- Obtain permission from the eThekweni municipality health department for press releases and release of results to communities/stakeholders.
- The department has to receive recognition for the assistance given.
- Any amended to the study to be communicated with the eThekweni Municipality Health Unit and the relevant amendment form obtainable from the unit to be submitted.
- Withdrawal of permission to conduct research will be left to the discretion of the eThekweni Municipality Health Unit.

Yours faithfully

[Redacted Signature]

Deputy Head of Health

Signature: [Redacted]
Date: 22/01-2016

Appendix 3a: Permission letter to the District Manager

P. O. Box 560
Tongaat
4399

The District Manager
83 King Cetshwayo Highway,
Durban,
4001

REQUEST FOR PERMISSION TO CONDUCT A STUDY WITH THE COMMUNITY CARE GIVERS.

I am the Nursing Services Manager at Hambanathi Primary Health Care clinic in the North Sub-District. I am a Master's student at the Durban University of Technology. I would like to conduct a study: Title: *Experiences of community care givers in nutritional assessment of children under 5 years in eThekweni District.*

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For further information: the research supervisor: Ms Dudu Sokhela: 031-3732292.

Sincerely,

.....
Ms G.B. Ndlovu

Email: pretty.ndlovu@durban.gov.za

Cell No: 076-782 1423

Appendix 3b: Approval letter from the District Manager

Appendix 3b:



health

Department:
Health
PROVINCE OF KWAZULU-NATAL

DIRECTORATE:

Physical Address: 83 King Cetshwayo Highway, Mayville, Durban, 4001
Postal Address: P Bag X54318, Durban 4000
Tel: 031 - 2405308 Fax: 031 2405555 Email: somaroo@ukzn.ac.za

eThekweni District Office

5 January 2016

Dear Ms Ndlovu

Re: Experiences of Community Care Givers in nutritional assessment of children under five years, in Ethekeeni district

I have pleasure in informing you that your application to conduct research has been approved, to interview Community Care Givers (CCGs) working in the north area six of Ethekeeni.

Please note the following:

- i. All research activities must be conducted in a manner that does not interrupt clinical care,
- ii. logistical details must be arranged with the relevant operational manager of the facility where CCGs are based,
- iii. this research project should only commence after final approval by the KwaZulu-Natal Health Research and Knowledge Unit, and full ethical approval, has been granted, and
- iv. a report of your findings should be forwarded to the Ethekeeni district office on completion of your project.

Yours sincerely

H Somaroo (Dr)
Medical Officer- Public Health Medicine

Appendix 4a: Permission letter to the KZN Department of Health

P. O. Box 560
Tongaat
4399

KwaZulu-Natal Department of Health
Private Bag X9051
Pietermaritzburg
3200

REQUEST FOR PERMISSION TO CONDUCT A STUDY WITH THE COMMUNITY CARE GIVERS

I am the Nursing Services Manager at Hambanathi Primary Health Care clinic in the North Sub-District. I am a Master's student at the Durban University of Technology. I would like to conduct a study: Title: *Experiences of community care givers in nutritional assessment of children under 5 years in eThekweni District*.

The aim of the study is to determine the cause of malnutrition in children under five years, and also to describe the experiences of the community care givers on nutritional assessment in this age group. Interview with CCGs will take about 20 to 30 minutes. Participation will be voluntary. Anonymity and confidentiality will be maintained at all times. The study might benefit the community by reducing malnutrition in children under five years. The policy makers might use the study in formulation of the health policies. On completion of the study, the copy will be available to you. Please find enclosed copies of the summary of proposal, interview guide, and the university ethics clearance.

For further information: the research supervisor: Ms Dudu Sokhela: 031-3732292.

Sincerely,

.....

Ms G.B. Ndlovu


Email: pretty.ndlovu@durban.gov.za

Cell No: 076-782 1423

Appendix 4b: Approval letter from the KZN Department of Health

FROM: HEALTH SURV M&E 10:0855093437 25/01/2016 09:27 #352 P.001

Appendix 4b:

 **health**
Department:
Health
PROVINCE OF KWAZULU-NATAL

DIRECTORATE:
Health Research & Knowledge
Management

Physical Address: 330 Langalibalele Street, Pietermaritzburg
Postal Address: Private Bag X9051
Tel: 033 395 2805/ 3189/ 3123 Fax: 033 394 3782
Email: hrkm@kznhealth.gov.za
www.kznhealth.gov.za

Reference: 012/16
KZ_2015RP27_92

Date: 22 January 2016
Dear Ms PG Ndlovu
Email: pretty.ndlovu@durban.gov.za

Approval of research


1. The research proposal titled 'Experiences of community care givers in nutritional assessment of children under 5 years in eThekweni District' was reviewed by the KwaZulu-Natal Department of Health.

The proposal is hereby **approved** for research to be undertaken among Community Care Givers from Ward 58,59,60,61 and 62 attached to Primary Health Care Clinics in the North Area Six of eThekweni District.

2. You are requested to take note of the following:
 - a. Make the necessary arrangement with the identified facility before commencing with your research project.
 - b. Provide an interim progress report and final report (electronic and hard copies) when your research is complete.
3. Your final report must be posted to **HEALTH RESEARCH AND KNOWLEDGE MANAGEMENT, 10-102, PRIVATE BAG X9051, PIETERMARITZBURG, 3200** and e-mail an electronic copy to hrkm@kznhealth.gov.za

For any additional information please contact Mr X. Xaba on 033-395 2805.

Yours Sincerely


Dr E Lutge

Chairperson, Health Research Committee

Date: 22/01/16

Fighting Disease, Fighting Poverty, Giving Hope

Appendix 5a: Letter of information and consent



Title of the Research Study: Experiences of community care givers in nutritional assessment of children under 5 years in eThekweni District.

Dear Participant

Thank you for agreeing to be part of this research.

Principal Investigator/s/researcher: Gabi Ndlovu (B Cur ED ET ADM)

Co-Investigator/s/supervisor/s: Ms. D. G. Sokhela M Tech: Nursing (Supervisor), Prof. MN Sibiya D Tech: Nursing (Co supervisor).

Brief Introduction and Purpose of the Study: I will be conducting a study entitled as above. The purpose of the study is to describe the experiences of the CCGs in the assessment of malnutrition in children of this age group so as to determine the reasons for malnutrition in children under five years old.

Outline of the Procedures: I will ask you few questions on the experiences in your job. The interview will last for about 20–30minutes. I also kindly request to use a voice recorder to capture the discussions. If you agree to participate in the study I will conduct an interview in a private and quiet room in the clinic in which you report.

Risks or Discomforts to the Participant: I do not foresee any risks since your participation only entails interviews.

Benefits: This study might increase the knowledge and strengthen the practice of the CCGs, by so doing the health system together with the community might benefit.

Reason/s why the Participant May Be Withdrawn from the Study: You may withdraw from the study at any stage, participation is voluntary. There will be no adverse consequences if you decide to withdraw.

Remuneration: There will be no monetary incentive that you will receive from participating in the study.

Costs of the Study: Participants will be no expected to cover any cost in the study.

Confidentiality: Only the researcher and supervisors will have access to the information you provide, Codes will be used to identify the clinics as well as participants. The list of participants and the codes will be kept under lock and key, records of the recorded interviews will be kept in a computer locked with password only known to the researcher.

Research-related Injury: There are no injuries anticipated because only interviews will be conducted.

Persons to Contact in the Event of Any Problems or Queries:

Please contact the researcher Ms G.P Ndlovu (076 782 1423) or my supervisor DG. Sokhela (031-373 2292.) or the Institutional Research Ethics administrator on 031-373 2900. Complaints can be reported to the DVC: TIP, Prof F. Otieno on 031 373 2382 or dvctip@dut.ac.za.



CONSENT

Statement of Agreement to Participate in the Research Study:

- I hereby confirm that I have been informed by the researcher, _____ (name of researcher), about the nature, conduct, benefits and risks of this study - Research Ethics Clearance Number: _____,
- I have also received, read and understood the above written information (Participant Letter of Information) regarding the study.
- I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will be anonymously processed into a study report.
- In view of the requirements of research, I agree that the data collected during this study can be processed in a computerised system by the researcher.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.
- I understand that significant new findings developed during the course of this research which may relate to my participation will be made available to me.

_____	_____	_____	_____
Full Name of Participant	Date	Time	Signature

I, _____ (name of researcher) herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

_____	_____	_____
Full Name of Researcher	Date	Signature

_____	_____	_____
Full Name of Witness (If applicable)	Date	Signature

_____	_____
Full Name of Legal Guardian (If applicable) Date	Signature

Appendix 5b: Incwadi enikeza ulwazi ngocwaningo nesivumelwano



Sawubona,

Ngiyabonga kakhulu ngokuthi ube ingxenye yalolucwaningo.

Isihloko socwaningo: Izimo onompilo ngokuhlola isifo sendlala kubantwana abangaphansi kweminyaka eyisihlanu abahlangabezana nazo emphakathini waseThekwini.

Umcwaningi omkhulu: Gabi Ndlovu (B Cur)

Obheke Umcwaningi: Ms Dudu Sokhela (M Tech: Nursing)

Isingeniso: Indlala ingumgogodla wempilo nezomnotho emazweni asakhulayo. Ibonakala iyingqinamba enkulu lapha ezweni lase Mzansi Afrika kubantwana beminyaka engaphansi kwemihlanu. Isifo sendlala kumntwana asigcini nje ngokubulala, kodwa siphinda sibe nomthelela omubi ekukhuleni kwakhe ngokomqondo uma esemdala. Inhlango kazwelonke yezempilo yasungula uhlelo lokuqeqeshwa konompilo ukuze babheke emphakathi bahlale abantwana abahlaselwa isifo sendlala babaphuthumise emtholampilo.

Injongongqangi yocwaningo: Injongo yocwaningo ukuthola ukuthi yini imbangela yesifo sendlala kubantwana abaneminyaka engaphansi kwemihlanu. Ukuhlaziya izingqinamba onompilo abahlangabezana nazo emphakathini uma be hlola labantwana isifo sendlala.

Inqubo yocwaningo: Onompilo abazikhethele bona ukungenela ucwaningo bazohlalana nomcwaningi ubuso nobuso emitholampilo lapho bebika khona ukusebenza kwabo emphakathini, lokho kuzokwenzeka emva kukoba seabikile ngokusebenza kwabo ngesikhathi santambama ukuze bangaphazamiseki emsebenzini wabo. Inkulamo iyobanjelwa egunjini elingenamsindo elingasebenzeli. Kuyothatha kuphela imizuzu engamashumi anabili kuya kwamathathu ukuxoxisana nonompilo.

Amathuba okungaphatheki kahle: Ucwaningo alunabungozi ngoba luzobandakanya ukuphendula imibuzo kuphela.

Inzuzo: Umphakathi wonkana ungazuza ukuthi izinga lokuphila kwabantwana lisimame, kuphinde kwehle nezinga lokuthuthuleka kwezingane ezibhedlela.

Lolucwaningo lungasetshenziswa abasunguli bemiquulu emikhulu yezeMpilo.

Isizathu sokuhoxiswa kulolucwaningo: Ongenele ucwaningo angahoxa noma kunini uma efisa ngaphandle kokujeziswa.

Inkokhelo: Akukho nkokhelo etholakalayo kulolucwaningo, futhi akukho mali engakhokhwa ngongenele ucwaningo.

Izindleko zocwaningo: Zonke Izindleko zocwaningo zibhekene nami njengomcwaningi, akukho lutho obhekeke ukuthi ukukhokhe wena.

Ukuvikeleka kwesithunzi: Kuzoqinisekiswa ngokusetshenziswa kwezinombolo kuphela, izinsiza zocwaningo ziyovalelwa endaweni ehluthulelwayo ngaso sonke isikhathi

Ingozi engadalwa ucwaningo: Abukho ubungozi kulolucwaningo

Ongabathinta uma kunenkinga noma kukhona ofuna ukukubuza: Uma uhlangabezana nenkinga noma kukhona ofisa ukukwazi ungathintana nalaba abalandelayo: umcwaningi: Gabi Ndlovu: inombolo yocingo: 076 782 1423, Umsizi wocwaningi: Ms. Dudu Sokhela: 031-373 2292.



IMVUME

Isitatimende sesivumelwano sokuhlanganyela ocwaningweni

- Mina ngiyaqinisekisa ukuthi ngichazeliwe umcwaningi u..... ngohlelo nangenzenzo yocwaningo kanye nangobungozi balo. Inombolo yemvume yekomidi.....
- Ngichazeliwe, ngafundiswa ngezwa ngakho konke okuqondene nocwaningo.
- Ngiyazi ngivumelekile ukuhoxa esivumelwaneni engisenzile ngokuthanda kwami futhi angiyikuhlukunyezwa ngalokho.
- Nginikiwe ithuba elanele lokubuza futhi ngachazeleka ngokwanele, ngakho ke ngiyavuma futhi ngizimisele ukuhlanganyela kulolucwaningo.

Amagama aphelele.....Usuku.....Sayina.....

Ongenele ucwaningo

Minangiyavuma ukuthi ngimazisile umhlanganyeli ngocwaningo.

Amagama aphelele.....Usuku.....Sayina.....

Amagama omcwaningi

Amagama aphelele.....Usuku.....Sayina.....

Appendix 6a: Interview guide

Date: _____

Facility no:

Participant no:

Demographic data

Age: _____

Gender: _____

Race: _____

Years of experience: _____

Grand tour question

- What are your experiences in assessing malnutrition in children in the community where you work?

Guided tour questions

- Describe the support that you get performing your duties
- What challenges are you experiencing in assessing malnutrition in children under five years?
- What would be your recommendations regarding solutions to these solutions?

NB: The questions will be guided and supported by probing where necessary so that the researcher can get clarity on information given.

- Elaboration probes
- Continuation probes
- Clarification probes
- Attention probes
- Completion probes
- Tell me more about.....
- What happened then.....
- Could you explain.....

Appendix 6b: Uhla lwemibuzo

Usuku: _____ Inombolo yomtholampilo: inombolo yongenela ucwaningo:

Imininingwane yongenele ucwaningo

Iminyaka: _____

Ubulili: _____

Ubuzwe: _____

Iminyaka yolwazi: _____

Umbuzo omkhulu womhlangano

- Chaza ngamazwi akho izimo ohlangabeza nazo uma ukala futhi ubheka isifo sendlala kubantwana endaweni osebenza kuyo.

Imibuzo yokusekela umhlangano.

- Chaza usizo/ uxhaso oluthola uma wenza umsebenzi wakho.
- Iziphi izingqinamba ohlangabezana nazo emphakathini ngokukala ubheke isifo sendlala ezinganeni?
- Iziphi iziphakamiso ukuxazulula lezizingqinamba?

Qaphela: Lemibuzo engenhla iyonanelwa eminye imibuzo engacacisa kahle uma kunesidingo ukuze umncwaningi athole kahle okushiwo ocwaningwayo

- Yanda ngamazwi
- Qhubeka
- Cacisa kabanzi
- Qedela
- Ake ungitshele nge.....
- Kwase kwenzekani.....
- Ungangichazela.....

Appendix 7: Certificate of editing from a professional editor

DR RICHARD STEELE

BA, HDE, MTech(Hom)

HOMEOPATH and EDUCATOR

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4058

Email: rsteele@telkomsa.net

EDITING CERTIFICATE

Re: **Pretty Gabisile Ndlovu (DUT)**

Master's dissertation: **EXPERIENCES OF COMMUNITY CARE GIVERS OF NUTRITIONAL ASSESSMENT OF CHILDREN UNDER 5 YEARS IN ETHEKWINI DISTRICT**

I confirm that I have edited this dissertation and the references for clarity, language and layout. I am a freelance editor specialising in proofreading and editing academic documents. My original tertiary degree which I obtained at UCT was a B.A. with English as a major and I went on to complete an H.D.E. (P.G.) Sec. with English as my teaching subject. I obtained a distinction for my M. Tech. dissertation in the Department of Homeopathy at Technikon Natal in 1999 (now the Durban University of Technology). During my 13 years as a part-time lecturer in the Department of Homeopathy I supervised numerous Master's degree dissertations.

Dr Richard Steele

22 June 2016

electronic

Appendix 8

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