

**CAREGIVERS PERCEPTIONS ON FACTORS CONTRIBUTING TO
THEIR CHILDREN'S MALNUTRITION**

BY

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**UNIVERSITY of the
WESTERN CAPE**

A full thesis submitted in the partial fulfillment of the requirements for the degree of



MASTER IN SOCIAL WORK

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November 2018

This study is dedicated to:

My late grandfather, Seabata Lehloenya

My parents, Mr & Mrs. Polaki,

My husband, Thebe Ntho and

My daughter, Realeboha Ntho

November 2018



UNIVERSITY *of the*
WESTERN CAPE

DECLARATION

I declare that Caregivers' Perceptions on Factors Contributing to their Children's Malnutrition is my own work, that it has not been submitted for any degree or examination to any other university and that all the sources I have used or quoted have been acknowledged as complete references.

Busisiwe Polaki



Signed: 

Date: 14/11/2018

ACKNOWLEDGEMENTS

I wish to express my sincere gratitude and recognition to the following people for their unconditional support and assistance during my studies:

- The Almighty God, for taking me through this journey, giving me strength and wisdom
- My supervisor, Dr. Anna-Marie Beytell. Thank you for your support, patience, guidance encouragement and also for pushing me to reach my full potential when I was giving up. Thank you for going extra mile. May the God Lord bless you and keep you safe and give you the strength to achieve all that you desire;
- My dear husband Thebe Ntho. Thank you for instilling in me the belief that I can achieve what I set to achieve and believing in me; you are my rock.
- My beautiful daughter, Realeboha Ntho for her continuous understanding all the times mammy was away from home;
- My writing coach, Dr. Adeniyi Olushola who gave me courage during hard times and always had time for my work. Thank you for your support.
- My colleagues and friends (Uwarren, Albertina, Mafika and Godfrey) for the laughter, the motivation, support and encouragement during good and bad times;
- To Dr Karen Prins, for believing in me and seeing the potential in me, above all for the opportunity you gave me. Thank you.
- To all my respondents who took part in this study, my heartfelt thanks to you.

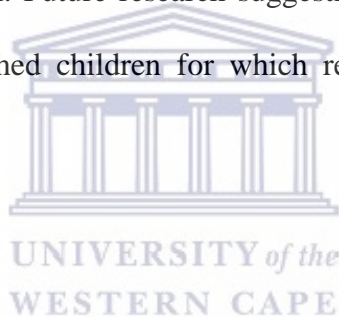
ABSTRACT

Complex factors contribute to child malnutrition. These include various factors for example stress, trauma, cognitive abilities and education, poverty, environmental and cultural practices. Caregivers' situations and perceptions regarding these factors are of utmost importance in child malnutrition. Lesotho has a high incidence of malnourished children irrespective of various interventions to address the problem. The research question that the researcher wanted to answer is: What are caregivers' perceptions on factors contributing to their children's malnutrition? This was the question as caregivers' environments and perceptions influence child malnutrition and they are the ones that accompany the children to the hospital where this research was done. The research goal was to get an understanding of caregivers' perceptions on factors contributing to malnutrition. In order to reach the goal, the objectives were: To explore the factors contributing to malnutrition; to describe the factors contributing to malnutrition and to give recommendations to social workers and the multi-disciplinary team in order to address the factors contributing to malnutrition as preventative measures.

The theoretical framework used for the research was the conceptual framework of UNICEF (1990) as the perceptions of carers are constructed by their environmental and cultural practices. The study used a qualitative research approach with an explorative, descriptive study design. The research population included all the carers of a specific ward in a hospital in Maseru, Lesotho. Non-probability, purposive sampling was used. Data was collected by semi-structured interviews with an interview schedule and focus groups. Analysis was done by thematic analysis where themes, categories and sub-categories will be done. Ethical considerations for this research included: voluntary participation, participants were not penalized when they did not participate and informed consent was obtained after the information on the research was given. There was no deception of participants and the

information on the research was explained with an information sheet. Privacy, anonymity and confidentiality were ensured. This research resulted in emotional reactions of the carers' and those were referred to relevant resources.

The findings of this research resulted in conclusions and recommendations to social workers and multi-disciplinary team in order to address the factors contributing to malnutrition as preventative measures. Findings from this study conclude what was found in the literature regarding factors contributing to malnutrition and that resources and support are lacking in communities. This led to recommendations aiming at MDTs, government, NGOs and social workers working in institutions, to align with community members in order to strengthen working relationships with the aim of providing the necessary support services to families caring for malnourished children. Future research suggestions are also aimed at supporting caregivers caring for malnourished children for which reasons for re-admissions will be assessed and evaluated.



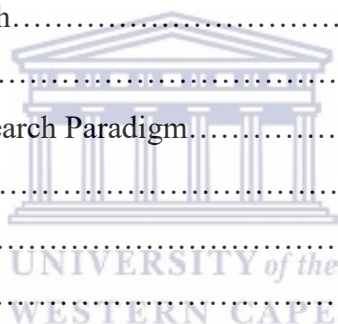
Keywords: caregivers, perceptions, children, malnutrition, factors, contributing

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CHAPTER 1

ORIENTATION TO THE STUDY

1.1 INTRODUCTION

Generally, malnutrition refers to under-nutrition and over-nutrition (Blossner and De Onis 2005). Under-nutrition describes the deficiency in protein sources resulting in Kwashiorkor and Marasmus whereas over-nutrition is defined by obesity. In both cases of malnutrition, (over-nutrition and under-nutrition), different countries experiences either or both nutrition challenges. In under-developed countries, mostly in Africa, including Lesotho have been reported to experience under-nutrition.

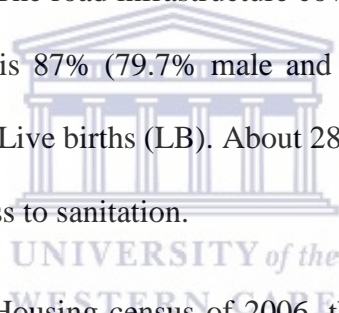
It is important to note that malnutrition is a threat to the health and wellbeing of millions throughout the world and remains to be the international public health problem. The highest proportion of these children was found in South Central Asia and Africa and it was estimated that 20% of children under the age of five in poor countries are underweight (Walraven, 2011).

Following this, malnutrition contributes to more than one third of the child mortality, approximately 35% of the disease burden in children less than five years, and 11% globally (UNICEF, 2009; Black, 2008; Le Roux, le Roux, Comulada, Greco, Desmond, Mbewu Rotheram-Borus, 2010).). UNICEF (2011) estimated that 150 million children (28%) in developing countries including Lesotho were malnourished, and these were children under the age of five and reported globally an estimated 2 million children below the age of five to have been admitted for the treatment of severe malnutrition in 2011.

Malnutrition is the immediate result of inadequate dietary intake, the presence of disease or the interaction between these two factors WHO (1997). As much as Lesotho faces child malnutrition problems and is one of the most economically unstable countries in Southern

Africa, it subscribes to initiatives of the United Nations, Millennium Development Goals (MDG) one of the aims of which is to reduce the number of people suffering from hunger by 50 % by 2015 (UNICEF, 2006). The prevalence of stunted children under the age of five 42%, 14% are underweight, and 2% are wasted and 13% of infants are born with a low birth weight, (UNICEF, 2009). The prevalence of overweight or obesity of those aged 15 and above are 50% (WHO, 2009). In this regard, Lesotho will not meet MDG 1 (eliminating hunger by halving 1990 rates of child underweight by 2015) when the current situation is considered (UNICEF, 2009).

It is important to note that Lesotho measures 35,000 square kilometers in area. It is divided into four topographic zones and ten administrative districts. The World Bank classifies Lesotho as a lower-middle income country. The road infrastructure covers a significant proportion of the country. The adult literacy rate is 87% (79.7% male and 93.6% females) while the Infant Mortality Rate (IMR) is 94/1000 Live births (LB). About 28% of the population lack access to clean water while 42% lack access to sanitation.



In terms of the Population and Housing census of 2006, the population of the Kingdom of Lesotho was estimated at 1.8 Million (1,876,633) with an annual growth rate of 1.9%. The United Nations Population Division of the Economic and Social Council estimates the current (2013) population at just over 2 Million. The 2006 census found that young people (15-24) comprised 23.5%, and Women of Child-Bearing Age (WCBA) 24%, of the total population. The Maternal Mortality Ratio (MMR) has increased from 282 in the 1990s to 939 -1152 per 100,000 LB in 2009 (UN and DHS 2009).

1.2 LITERATURE REVIEW AS ORIENTATION TO THE STUDY

This section presents the existing literature on malnutrition and the underlying factors such as food security, adequate care of mothers and children and health environment.

1.2.1 Economic factors and malnutrition

The Burden of Disease Research Unit reported that the situation of inequality and poverty could lead to the problem of malnutrition. It further stated that the most significant immediate causes of malnutrition are inadequate food intake, since the large part of the population comes from the low-income household. Poverty and lack of food security are the primary reasons why malnutrition occurs in developing countries (Steyn, 2008).

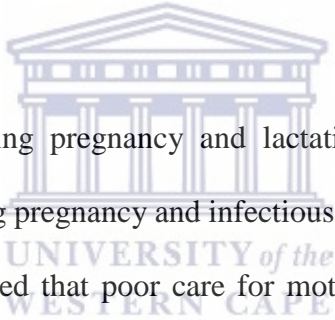
When income decreases, the quality and quantity of food also decreases. Evidence shows that when unemployment and low wages are presenting factors, families eat cheaper food, which is less nutritious, leading to weight loss and malnutrition (UNICEF, 2009b).

Poor children have higher rates of infections, less access to adequate nutrition and are more exposed to the consequences of the lack of information that is common in their family settings. The results of inadequate nutrition in the first-year compromise intellectual capacity, which do not manifest until later at school age. Infections and lack of nutrients in preschool children intensify the adverse effects of intrauterine growth retardation. The problem is particularly important in girls because they represent the intergenerational link that perpetuates the consequences of poor nutrition (Jones, 2006).

The rapid increase in chronic hunger experienced in recent years occurred between 2003–2005 and 2007. Food and Agricultural Organization (FAO's) provisional estimates show that, in 2007, 75 million more people were added to the total number of undernourished relative to 2003–2005. While several factors are responsible, high food prices are driving millions of people into food insecurity, worsening conditions for many who were already food-insecure, and threatening long-term global food (FAO, 2008).

1.2.2 Family care of children

It is important to note that mothers need time, attention and support to meet the physical, mental and social needs of the growing child. They need support and cognitive stimulation in performing duties like child feeding and health seeking behavior. Lack of this can lead to physical and psychological trauma to mothers and as a result they will fail to take good care of children resulting in malnutrition. They must be physically and emotionally stable (Smith and Haddad, 2000). One of the immediate causes of child malnutrition is caregivers, trauma and poor psychosocial care. The mother-baby bond should be forged earlier for better cognitive, emotional and social development later in life (Play Therapy Africa, 2009). Gender inequality places woman in a situation where they cannot make decisions about their bodies in terms of the use of family planning to limit the number of children to manage them well (De Lange, 2004).



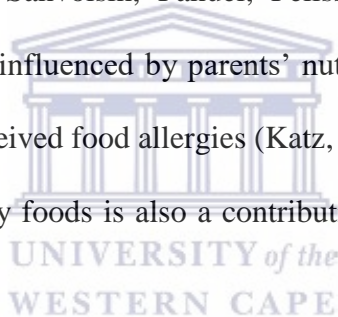
Care for women is critical during pregnancy and lactation (UNICEF, 2009). Maternal malnutrition prior to and/or during pregnancy and infectious diseases cause child malnutrition. A study done in Indonesia showed that poor care for mothers during pregnancy, lactation, failure to decrease workload and protect breastfeeding combined with poor maternal nutrition were factors that were likely contributing to malnutrition. The same study shows that in some traditional cultures, the care for women and children are not prioritized (Fukagawa, 2008).

Care provided to children becomes apparent through the way they are fed, nurtured, taught and guided (UNICEF, 1998). Hence, care provided to children is closely related to maternal education and knowledge and studies confirm that the risk of malnutrition is higher when maternal education is low (Hien and Kam, 2008). Unhealthy eating practices and early weaning were also risk factors. Young mothers tend to have malnourished children. The reason for this is likely to stem from their lack of maturity, which influence their childcare practices. In this

regard, childcare practices include protecting the children's food and drinks from contamination to reduce the risk of infections (Saloojee, De Maayer, Garrenn and Kahn, 2007; Kimani, 2013). A caregiver's unwashed hands can cause infections such as diarrhea, (Abate, Kogi-Makau and Muroki, 2001). A study conducted by Diteboho (2010) in Botswana found that lack of knowledge about malnutrition; wrong perceptions by mothers and illiteracy were among the contributing factors to the disease.

1.2.3 Culture and Malnutrition

Cultural and social practices that lead to the exclusion of certain foods due to food taboos, and dietary trends and migration from rural areas to urban slums are the contributing factors to the development of protein-energy-malnutrition (Torún and Chew, 1994; Torún, 2006; Piercecchi-Marti, Louis-Borrione, Bartoli, Sanvoisin, Panuel, Pelissier-Alicot, and Leonetti, 2006). Importantly, dietary choices are influenced by parents' nutritional ignorance, preference for alternative foods and true or perceived food allergies (Katz, Mahlberg, Honig and Yan, 2005). A delay in giving children family foods is also a contributing factor to malnutrition (Torún, 2006).



The National Department of Health: Directorate Nutrition (2005b) assert that when exclusive breastfeeding is not practiced it can contribute to a high prevalence of malnutrition. Globally, the practice of breastfeeding is declining (Torún and Chew, 1994; National Department of Health, South Africa, 2003). Even though breast milk is rich in high quality protein, it must be noted that prolonged breastfeeding causes a delay in the introduction of complementary foods and can result in micronutrient deficiencies, as human milk is low in iron and zinc (Kalanda, Verhoeff, and Brabin, 2006). On the other hand, breast milk substitutes may not be suitable because of a high renal solute load (cow milk) or low energy density (diluted cow's milk or incorrect formula) (Duggan and Golden, 2005).

It must be noted that the whole social aspect of food sharing makes it unrealistic to expect food donations to be used exactly how they were intended. The extra food is often provided to the father or main income earner rather than to the children, as he is logically seen to play a more key role in the family's survival strategy. Therefore, this leaves children susceptible to malnutrition (Marini, Alessandra, Gragnolati and Michele, 2003). In South African rural areas, various groups lead agricultural cultivation-based lifestyles that only allow them to live on the limited amount of resources given to them by their land. The food resources they have access to lack several vital nutrients, making malnutrition among these people more prevalent than among pastoral people and other people with more animal-based diets (Niedzwiecki, 2012).

1.2.4 Environmental factors contributing to Malnutrition

The availability of safe water, sanitation, health care and environmental safety including shelter plays a role in the contribution to malnutrition. Environmental factors contribute to a lack of food and ultimately to malnutrition. In Central America, for example, lack of food is not usually the primary cause of child malnutrition but has more to do with dietary and hygienic practices and access to health care (Smith and Haddad, 2000).

The basic determinants include: the potential resources available to the country or community, which are limited by natural environment, access to technology and the quality of human resources. The political, economic, cultural and social factors affect the utilization of these potential resources and how they are translated into resources for food security, care and health environments and services (Smith and Haddad, 2000).

Lack of access to safe water or improved sanitation, unhygienic food handling or unhygienic conditions inside or around households, are important factors contributing to malnutrition. These are all factors that indirectly could cause malnutrition through increasing the risk of infections and especially diarrhea. It further underscores the position of an unhealthy

environment as an underlying factor of child malnutrition. A significant proportion of undernutrition seen in children is precipitated by infection due to the unhealthy state of their physical environment (UNICEF, 1998). Diarrhea, respiratory infection and malaria are particularly important causes of child malnutrition (Tomkins and Watson, 1989) and these same infections are influenced by environmental quality.

The destruction of natural eco-systems, the loss of bio-diversity, and climate change increase health hazards for people and affect the nutritional status (Blossner and De Onis, 2005). Fukagawa (2008) sees overcrowded and unsanitary life conditions as the cause of malnutrition since germs cause diarrhea and vomiting from dirty foods, dirty dishes, dirty house and compound, and dirty drinking water.

A study conducted by UNICEF, (2013) in Lesotho found that there is a 70% drop in domestic agricultural production that has put more than 725,000 people, over a third of the population, at serious risk of food insecurity. The sharp reduction in agricultural yields for 2011 and 2012, due to a series of flooding, late rains and early frost, has reduced domestic production to only 32% of the national average cereal harvest of the last 10 years. In August 2012 the Right Honourable Prime Minister of Lesotho declared an emergency food crisis in Lesotho, with this situation children were likely to be malnourished from not getting enough food to eat or being breastfeed non-nutritious milk from hungry mothers. In September 2012 following the declaration of emergency, the Government of Lesotho launched a response plan, called “Appeal for Humanitarian Assistance”, requesting support from development partners and the international community.

1.3 THEORETICAL FRAMEWORK

This study utilizes the United Nations Children’s Fund’s framework for the causes of child malnutrition as theoretical framework (UNICEF, 1990). This is discussed in detail in chapter

two. It is comprehensive, incorporating both biological and socio-economic causes of child malnutrition and it encompasses causes at both macro and micro levels. There are three levels of causality corresponding immediate, underlying and basic determinants of child malnutrition. The **basic determinants** of a child's nutritional status are potential resources in the environment, technology and people, socio-cultural environment, political and economic structure, which lead to poverty.

The **underlying determinants** of the child's nutritional status include the following:

- Resources for food security, which comprise of food production, cash income and transfers of food in-kind. These contribute to household and food security.
- Resources for care, which include caregiver control of resources and autonomy, physical and mental status, knowledge and beliefs. These include care for mothers and children.
- Resources for health are safe water supply, adequate sanitation, healthcare availability and environmental safety and shelter. These are the health environment and services.

The **immediate determinants** of the child's nutritional status are the dietary intake and health status of the child.

This research will focus on **the underlying determinants of the child's nutritional status** (UNICEF, 1990).

1.3 PROBLEM FORMULATION

Health service in Lesotho faces several challenges that include the continued increase in morbidity and mortality, as well as declining coverage of essential services. The high level of poverty exacerbates the already dire situation. Lesotho therefore adopted the Primary Health Care (PHC) strategy in 1979. The public facilities (16 hospitals and around 200 Health Centers) are almost equally divided in ownership between the Government and the Christian Health

Association of Lesotho (CHAL). According to the Annual Joint Review (AJR, 2012), LDHS Program (2009) reports that the top ten causes of adult and child morbidity and mortality include communicable, non-communicable diseases and malnutrition. Stunting among children under five years and a risk factor for adult obesity, is reported as high at 39% and 15% of this proportion were severely stunted.

The Vision of the National Multi-Sectoral Integrated Strategic Plan for Prevention and Control of Non-communicable Diseases is that Basotho (citizens of Lesotho) is: A healthy nation, whose exposure to the main risk factors will be minimized and with improved access to care and rehabilitation; contributing to sustainable socio-economic development of Lesotho. In working towards the fulfillment of this vision, this study assists in identifying and bridging the gap between the health care providers, the community and families for effecting collaboration in early identification, management and treatment of childhood malnutrition. The study also assists in adding new information and modification of the already existing data about the social factors contributing to child malnutrition. The findings can be used in the development efforts of meeting the Millennium Development Goals (MDG), which are threatened by the double burden of diseases.

When the researcher considered the above information, she wanted to answer the research question: What are caregivers' perceptions on factors contributing to their children's malnutrition?

The researcher focused on an introduction to the research methodology, which was used during this research in the following content of this chapter. The research methodology will however be discussed in more detail in chapter three.

1.5 RESEARCH GOAL AND OBJECTIVES

1.5.1 The goal the research

The goal of the research was to get an understanding of caregivers' perceptions on factors contributing to malnutrition.

1.5.2 The objectives of the research

- To explore the factors contributing to malnutrition;
- To describe the factors contributing to malnutrition
- To give recommendations to social workers and the multi-disciplinary team in order to address the factors contributing to malnutrition as preventative measures.

1.4 RESEARCH METHODOLOGY

1.6.1 Research approach and design

Qualitative research is based on information expressed in words, descriptions, accounts, opinions and feelings. This approach is common whenever people are the focus of the study, particularly small groups or individuals but can also concentrate on more general beliefs or customs (Walliman, 2006). The study used qualitative research approach since the objectives were to explore and describe the mothers' perceptions of factors contributing to malnutrition. The primary goal of qualitative studies is describing and understanding social actions and events in their natural setting of social actors (Babbie, 2001). The caregivers described their understanding of the underlying determinants in their natural setting contributing to their child's malnutrition.

The study was explorative and descriptive. Explorative studies are used to make preliminary investigations into relatively unknown areas of research. They employ an open, flexible and inductive approach to research as they attempt to look for new insights into the phenomena

(Terre Blanche, Durrheim and Painter, 2006). Descriptive studies aim to describe a phenomenon accurately, either through narrative-type descriptions, classifications or measuring relationships (Terre Blanche *et al.*, 2006). The researcher explored the perceptions of caregivers on their child's malnutrition to get new insights and then describe it in the findings of the study.

1.6.2 Social Constructivism as Research Paradigm

Social constructivism produces knowledge about the people's reality not constructing reality itself. Constructivists imply that the human world is different from the natural, physical world because it is constructed by culture and language (Patton, 2002). Caregivers construct their world by the way they perceive it. The perceptions are influenced by culture and linguistic constructs. These influenced the information they gave on the factors of childhood malnutrition and contribute to a better understanding of child malnutrition from their perspective, which can be included in assessment and intervention of the phenomenon.

1.6.3 Research Population and Sampling

This is the larger pool from which sampling are drawn. The population encompasses all the elements, which can be included in a study (Terre Blanche, *et al.*, 2006). The population of this study was all the caregivers of malnourished children in Queen Mamohato Memorial hospital in Maseru, Lesotho.

The study used non-probability sampling, which is any kind of sampling where the selection of participants is not determined statistically or randomly (Terre Blanche, *et al.*, 2006). The study focused on purposive non-probability sampling. Participants were selected because they could give information on the topic and were also available and willing to participate but are typical of the population are selected (Terre Blanche *et al.*, 2006). The sample was selected where not all caregivers had an equal chance to be selected and specific caregivers were

purposively chosen according to the following conditions: The sample was caregivers of children in a specific ward; with children under the age of five and included caregivers who did not get social work intervention before the interview. Most of the cases were caregivers of children with re-admissions of malnutrition.

The researcher interviewed the caregivers to the point of data saturation. This means collecting data until no new or relevant information emerges with respect to the objectives of the study (Charmaz, 2006).

1.6.4 Methods of Data Gathering

Semi-structured interviews were used to gain a detailed picture of caregivers' perceptions. The researcher had a set of predetermined questions on an interview schedule. Questions were nearly always open-ended to allow the participants to express themselves freely (De Vos, Strydom, Fouché and Delpont, 2005). The participants were each taken to a private room and given the information sheet and the consent form to fill. Permission was granted to record the information and transcribed by the researcher to ensure confidentiality. The researcher used Sesotho where caregivers were not fluent in English and this contributed to better data on the perceptions of the caregivers. Observation and participant observation methods were used as another method of collecting data. In this case the researcher was observing physical location (people's personal space) how did it contribute to their children's malnutrition, (Babbie, 2001) during the observation a checklist was used to gather some of the information. Focus groups discussion was also used as another method to collect data from caregivers of in-patients with malnutrition in Queen Mamohato Memorial hospital in Maseru, Lesotho.

1.6.5 Pilot study

A pilot study involves the testing of the study by using a small sample of the community for whom the research is planned and allowing the researcher to identify possible difficulties that

might occur during data collection (Bless, Smith and Kagee. 2006). The pilot study may be viewed as the dress rehearsal for the main investigation, a small-scale implementation of the planned investigation in an attempt to bring possible deficiencies to the fore timeously. The main purpose of conducting a pilot study is to assess the feasibility of the study and to test the interviewing - and probing skills, and to test measuring instruments such as the interview and the questionnaire or the program for analysis of data (De Vos *et al.*, 2011). Ten caregivers of children with malnutrition that were admitted in the hospital at the time of pilot study were interviewed and they were not part of the main research.

1.6.6 Data Analysis

In analyzing data, the first step was to prepare and organize the data where preliminary analysis was done during data collection. Data was then managed and read, and the researcher wrote memos in the transcriptions (De Vos *et al.*, 2011). The second step was to reduce the data and during this step categories were generated after coding the data. The researcher looked for alternative explanations where the emerging categories were not clear. The data was then interpreted, and themes, categories and sub-categories developed. The last step was to visualize, represent and display the data into themes and categories. The researcher also used an external coder who did thematic analysis independently. After the researcher and supervisor concluded with their analysis it was compared with the analysis of the independent coder and themes and sub-themes were finalized.

1.7 TRUSTWORTHINESS OF THE STUDY

In doing research, trust is fundamental. Trustworthiness is ensured by the application of credibility, transferability, dependability and confirmability (Guba and Lincoln in D’Cruz and Jones, 2006). These will be discussed in detail in chapter three. In this research, reflexivity was central in creating self-awareness and cultural awareness (Patton, 2002).

1.8 ETHICAL CONSIDERATIONS RELEVANT TO THIS RESEARCH

The participants were informed by an information sheet of the research (Appendix C). For the purpose of this study the following ethical considerations were implemented: no or limited harm to respondents, voluntary participation, informed consent (Appendix D), no deception of subjects, privacy, anonymity, confidentiality, referring for treatment when necessary and the researchers' actions were competent (De Vos *et al.*, 2011). During this research the researcher aimed not to harm the participant's, but participants could however be emotionally influenced by the study (Babbie, 2007) but were referred to appropriate resources for counseling when necessary. Participation was voluntary (Rubin and Babbie (2005) and no one should be forced to participate in a project. Participants in this study were respected and given opportunity to make choices what should or should not happen to them (Grinnell and Unrau, 2008). There was no withholding of information or offering of incorrect information and misleading of participant deliberately to ensure the participation of subjects when they would otherwise possibly have refused it (Struwig and Stead, 2001). By using pseudonyms, confidentiality and anonymity were guaranteed (Morris, 2006). The researcher ensured that she was competent, honest and adequately skilled to undertake the research (Walliman, 2006), by using regular supervision and consultation.

Permission for the research was obtained from the Lesotho ethics committee (Appendix A) and the Ministry of Health Research and Ethics committee (Appendix B)

1.9 DEFINITION OF CONCEPTS

1.9.1 Malnutrition

This is broadly used as an alternative to under-nutrition but technically it also refers to over nutrition. People are malnourished if their diet does not provide adequate calories, proteins, vitamins or minerals for growth and maintenance or if they are unable to fully utilize the

nutrients from the food, they eat due to illness. They are also malnourished if they consume too many calories (UNICEF, 2006). In this study the term is used to refer to under-nutrition.

1.9.2 Childhood

Early stage of existence. Time for children to be in school and at play, to grow strong and confident with the love of their family and community (UNICEF, 2005).

1.9.3 Contributing factors

These are forces or influences that work with other forces or influences to bring about a result (The American Heritage Dictionary of English Language, 2011).

1.9.4 Perceptions

“Perception” is the way in which something is regarded, understood, or interpreted or it can be a belief or opinion, often held by many people and based on how things are perceived (The American Heritage Dictionary of the English Language, 2011).

1.9.5 Children

Children’s Act No. 38 (2005) of South Africa defines a child as someone under the age of eighteen years.

1.9.6 Caregiver

A caregiver is a person or a relative, responsible for looking after another person who cannot look after him or herself in some or all respects. The term describes a range of relationships in which one-person cares for another, sometimes singly, sometimes in conjunction with others (Collins, 2002).

1.10 CHAPTERS TO FOLLOW

Below are the chapter overview guides for this thesis.

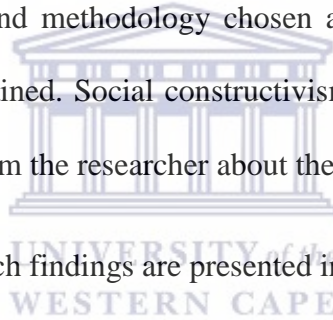
Chapter 1: This chapter presents an orientation to this particular study. It provides the background information about the research problem, which lead to this research. It highlights the aim of the study and its significance. This chapter introduces the theoretical framework, research design and methods.

Chapter 2 focuses on the review of literature and relevant previous research done on malnutrition. It also looks at extensive at theory used in the study. It discusses the relevance of the theories to the study by linking the two.

Chapter 3 presents the research methodology utilized in this study. It describes the research design, the research setting, study population, sample, inclusion criteria, and procedure of data collection, data analysis, ethical consideration and self-reflection during data collection. A review of the research design and methodology chosen as well as the motivation for this particular selection will be explained. Social constructivism was the selected design for this study to allow the setting to inform the researcher about the phenomenon.

Chapter 4: The empirical research findings are presented in detail in this chapter

Chapter 5: This chapter encompasses the conclusion and recommendations to multi-disciplinary healthcare team members.



CHAPTER 2
LITERATURE REVIEW
FACTORS CONTRIBUTING TO MALNUTRITION: AN OVERVIEW
RELATED TO THE UNICEF CONCEPTUAL FRAMEWORK

2.1. INTRODUCTION

A literature review provides focus to the study on what is known about the topic and what are unknown and what the theoretical frameworks with regards to the topic (Patton, 2002). Literature review was done initially to establish the research question and problem in this study but was mainly done after data analysis because the researcher wanted to hear the voices of the people and not the literature. The researcher therefore used inductive reasoning strategies during this research.

A theoretical frame work is identified to base research on and to refine the research problem (Terre Blanche *et al.*, 2006); UNICEF (1990) conceptual framework, which was used as a theoretical framework in this study, as well as the factors contributing to malnutrition will be discussed in this chapter.

2.2 THE UNICEF CONCEPTUAL FRAMEWORK

In order to understand the context of this study, UNICEF conceptual framework is illustrated in Figure 2.1. UNICEF conceptual framework identifies various causes of malnutrition, which include basic causes, underlying causes, immediate causes and outcomes. These causes will be presented in detail.

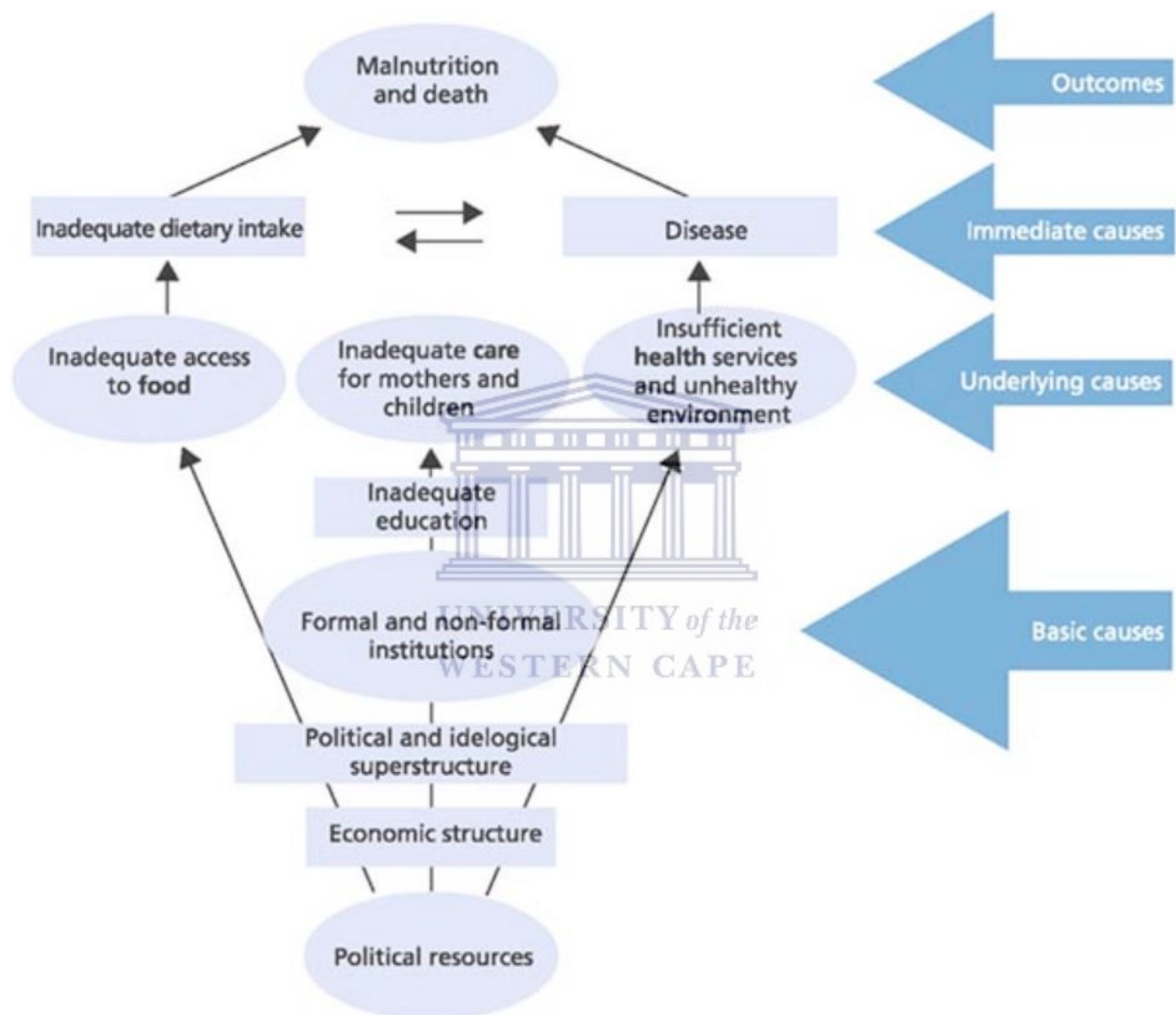


Figure 2.1: UNICEF’s Conceptual framework for the causes of malnutrition.

2.2.1 Basic causes of malnutrition

The basic causes of malnutrition refer to inadequate access to food and lack of institutional representation such as health care facilities and healthy environment. These basic causes of

malnutrition are influenced by the quantity and quality of human, economic and organizational resources. These resources are controlled structures such as political, economic, cultural, religious, formal and non-formal institutions and inadequate education. The basic causes for malnutrition are found at national and international level. The social, economic and political context creates the structural causes for malnutrition and these causes are deeply interrelated and affect the others mutually. These are a result of a weak state, that lack incentives for leaders to perform pro-poor development making the presence of political will an issue to consider (Collier, 2009).

2.2.1.1 Political structures

There is lack of strong political leadership for nutrition, lack of strong ownership and accountability and a lack of effective advocacy for nutrition. The uncertainty of roles and responsibilities about where nutrition belongs in the government bureaucracy create obstacles to policy innovation and adoption and to policy implementation (Steinmo, 2008). According to the World Bank and UNICEF (2002), nutrition does not have a designated institutional department in government. The Department can be within Prime Minister's Office or Vice President's Office; ministry of Health or ministry of Agriculture, ministry of Development, ministry of Planning; or in independent bodies. The characteristics of the institutional department are shaped by country specific context, ideas, stakeholders, and importantly, history and politics (Steinmo, 2008).

In 1987 the Government of Malawi established a national Food Security and Nutrition Unit in the Office of President and Cabinet. The nutrition community in that country welcomed it as a positive step toward addressing the alarmingly high rates of chronic malnutrition and child mortality. This step was surprising, given the lack of attention devoted to nutrition during the previous decades. Although establishment of this unit was preceded by many years of nutrition

advocacy by national and international institutions, it was precipitated by economic decline and conditions imposed by aid donors in the 1980s (Pelletier, 2002).

Institutional analysis of global agencies for nutrition pointed to the lack of an effective policy community among the agencies concerned with nutrition, due to “incoherence, lack of institutional leaders, and persistent underfunding” (Levine and Kuczynski, 2009). This is irrespective of the fact that a global level nutrition is claimed by several international agencies, including the Food and Agriculture Organization, International Fund for Agricultural Development, United Nations Children’s Fund, the World Food Program, the World Health Organization and other members of the United Nations System Standing Committee on Nutrition.

Political upheavals can lead to a reduction in food produces, which result in price increases (Mason, Bailes, Mason, Yambi, Jonsson, Hudspeth, Hailey, Kendle, Brunet and Martel, 2005). Gibrill *et al.*, (2004) state that even if the government has political will to exercise pro-poor policies and well-functioning institutions, the inter-sectorial nature of malnutrition often challenges the structures in the specialty field ministries, making coordination and access to information difficult to obtain.

2.2.1.2 Economic structures

Economic growth is an important catalyst for improving nutrition (DFID, 2010). The chances of a child being stunted and underweight are influenced by the negative effects of the economy on families (Grantham-McGregor, 1984; Zere and McIntyre, 2003; UNICEF, 2004a). Markets are negatively influenced by a decline in the economy and conflict and result in reduction in food production and price increases (Mason *et al.*, 2005).

A study conducted in Botswana to evaluate the level of malnutrition and the impact of some socio-economic and demographic factors of households on the nutritional status of children less than three years of age, revealed that malnutrition was more prevalent amongst boys than girls, underweight was less prevalent in children whose parents had informal businesses and decreased significantly when family income increased. This study also found that the higher the level of the mother's education, the lower the level of child underweight (Mahgoub, Nnyepi, and Bandeke, 2006).

Masiye, Chama, Chita, and Jonsson, (2010) conducted a national cross-sectional survey examining the nutritional status among children below five years of age in Zambia using the weight-for-height, weight-for-age and height-for-age. They found that household expenditure was a leading determinant of nutritional status of a child.

A country-specific Cost of Hunger in Africa (COHA) study found that Lesotho is losing 1.9 billion Maloti (US\$200 million) a year to the effects of child undernutrition, this amounts to more than 7 percent of the country's Gross Domestic Product (GDP). These monetary losses are a result of increased healthcare costs, additional burdens on the education system and lower productivity of the workforce, (WFPCOHA, 2016). The study further estimates that Lesotho could save 2.86 billion Maloti (US\$292 million) by 2025 if the prevalence of underweight in children were reduced from 10% to 5%, and stunting from one-third to one-tenth. It is recommended that His Majesty King Letsie III of Lesotho should lead the fight against malnutrition and urge all stakeholders to support Lesotho's ongoing efforts to prioritize nutrition as the African Union Nutrition Champion.

2.2.1.3 Cultural structures

Food is influenced by culture for most people and not based on the nutritional value. A plant or animal may be considered edible in one society and inedible in another. Probably one of the

most important things to remember in connection with the cultural factors involved in food habits is that there are many combinations of food, which will give same nutritional results (Nizel cited in Reddy and Anitha, 2015).

People's beliefs and practices relating to health are determined by the culture in which they live (Senol, Unalan, Çetinkaya and Ozturk, 2004). Culture and society are inseparable and integrated. Senol *et al.*, (2004) further note that the effects of culture are observed in all contexts, including health. Cultural practices are often based on hearsay and can be detrimental to general health where infants represent the core group most affected by traditional practices.

Adair *et al.*, (2004) conducted a study on families, cultural perceptions and beliefs on oral hygiene and dietary practices among ethnically and socio-economically diverse groups. The study found that attitudes towards tooth brushing, sugar snacking and childhood cavities were significantly different in families from deprived and non-deprived backgrounds and in families of children with and without cavities. Parents' perception of their ability to control their children's tooth brushing and sugar snacking habits were the most significant predictors when habits were reported. Parental attitudes had a significant impact on favorable habits to oral health but have been influenced by ethnic and cultural factors.

2.2.1.4 Religious structures

The religious affiliation of a child's family provides information on the expected dietary restrictions encountered by a child in his or her early growing years when exposed to fasting during pregnancy. Possible differences in women's autonomy and control over household resources arising from differences in preference across religions (Jayachandran and Pande, 2014; Coffey, 2013). These are factors that may contribute to the high rate of stunting and wasting among the children in these countries.

Numerous studies have examined the relationship between maternal religion and child health outcomes in resource-limited settings. Cau, Sevoyan and Agadjanian, (2013) analyzed religious differentials in infant mortality in Mozambique and found that affiliation with organized religion was negatively associated with mortality. Antai (2009) reported lower levels of child immunization among Muslims, compared to Christians, in Nigeria. Nigerian mothers' adherence to traditional religious beliefs increased the risk of infant death, compared to membership in organized religion (Christianity or Islam). Gyimah (2007) reported higher risks of death among Ghanaian children whose mothers adhered to Islam or a traditional religion, compared to children of Christian mothers.

2.2.1.5 Formal and non-formal structures

The role of the private sector in achieving nutrition security has been, and continues to be, a highly contentious issue. While there is acceptance that the private sector in its various forms does have a role to play, there is little consensus on what this should encompass and how it should be regulated (UNSCN, 2011). A report by Mokoro (2015) illustrates that lack of trust continues to confound the nutrition community's engagement with the private sector and ongoing tensions with the food industry may influence potential partnerships with other private sector enterprises, for example in service delivery, technology and innovations negatively.

2.2.1.6. Inadequate education

Education is a significant factor in improving health status therefore the education level of women, who are main care takers of children, has many positive effects on the quality of care (Mahgoub *et al.*, 2006; Larrea and Kawachi, 2005; Smith and Haddad, 2000). It is important to improve parents, especially mother's education on nutrition, sanitation and common disease prevention strategies to reduce malnutrition related mortality and morbidity. Quality of the food taken, choices and quantity are all at the discretion of the mother or care-giver. Poverty

and education are closely related and integrated into the implicit cycle of ignorance, disease and poverty (Bain, Awah, Geraldine, Kindong, Sigal, Bernard and Tanjeko, 2013).

Shafqat, Manzoor and Abbasi, (2013) conducted a community-based study, which revealed that child nutritional status is strongly associated with the literacy of mothers, their health awareness and child rearing practices. A report from the National Department of Health (2003) confirms that lack of nutritional information and knowledge, especially maternal nutrition education, can worsen malnutrition and leads to unhealthy dietary habits. For families to be healthy with a good nutritional status, they need knowledge regarding growth, purchasing, processing, and preparation and feeding a variety of food, in the right quantities and combinations (NDoH, 2005a). A lack of nutritional knowledge can also lead to misconceptions about food and negative food traditions that are passed on from generation to generation (NDoH, 2005b).

School education and knowledge can according to Christiaensen and Alderman (2001) influence the child's health and nutritional status in three ways:

- Formal education leads directly to better knowledge by mothers;
- Literacy acquired in school ensures that mothers are more capable of identifying health problems in children; and
- Mothers are more aware of modern diseases and where to get help and information when they have attended school. These authors agree that nutrition knowledge is not gained in the classroom, but school education of mothers can assist with care of children and with the household. Both female and male education can have a positive effect on the child's nutritional status. Having knowledge can contribute to a higher household income and better nutritional status when education is linked with strategies to improve both.

2.2.2 Underlying causes of malnutrition

The underlying causes of malnutrition can be grouped into three broad categories namely; household food insecurity, inadequate care, unhealthy household environment and lack of health services. Black, Allen, Bhutta, Caulfield, De Onis, Ezzati, (2008) referred to them as ‘food’, ‘care’ and ‘health’ factors.

2.2.2.1. Inadequate access to food

Food production, income for food purchases, or any transfers of food whether from other private citizens, national or foreign governments or international institutions are the resources necessary for gaining access to food (Smith and Haddad, 2000).

People have food security when they have physical and economic access to adequate, safe and nutritional food all the time to meet their dietary and food preferences for an active and healthy lifestyle (The World Bank, 2011). It is the recommendation of Food and Agricultural Organization (FAO) that a household must have satisfactory food availability, have adequate resources to acquire it and be able to consume it all the time to have an active healthy life (Smith and Haddad 2000; FAO, 1996). Poor agriculture production, destruction of infrastructure and markets and therefore loss of income, loss of livestock and insufficient land for food production, contribute to food insecurity. Families will also increase their credit to try and survive. These factors influence the quantity and quality of food available (FAO, 1996).

Experiencing food insecurity and poverty of children, causes low or inadequate food intake and sometimes disease, which lead to the development of malnutrition and death. These issues are among the most urgent social issues affecting households and their children (Crowther, 2008). Food shortages are a significant cause of malnutrition in many parts of the world (Smith

and Haddad, 2000). Poor distribution of food among families is one of the causes of food insecurity, which results into inadequate care for mothers and children (Masiye, *et al.*, 2010).

2.2.2.2 Inadequate care for mothers and children

Disordered feeding practices, nutritional status, repeated pregnancies, parent's separation and mother's health are the leading causes of malnutrition (Ijarotimi, 2013; Shargi, Kamran and Faridan, 2011).

Care practices as those behaviors and practices of caregivers, mother, fathers, siblings and child care providers that provide the food, stimulation and emotional support necessary for the children's healthy growth and development. These practices should be performed with affection and responsiveness to children and should include child feeding practices, health seeking behavior, support and cognitive stimulation for children and care and support of mothers during pregnancy and lactation (Smith and Haddad, 2000). A cross sectional study that was conducted by Mahgoub, *et al.*, (2006) in Botswana, also found that children raised by single parents suffered from underweight to a significantly higher level than children living with both parents.

A child that is born to an undernourished mother or born with a low birth weight has a high risk of remaining undernourished (UNICEF, 2009; Hailemariam, 2014). It is impossible for caregivers to provide this care without enough resources such as time and energy. In most societies, the mother constitutes the main provider for childcare and she experiences many constraints such as lack of resources, time, means, as well as spiritual, knowledge and cultural constraints (Engle *et al.*, 2000).

2.2.2.3. Insufficient health services and unhealthy environment

Access to good quality health services, including affordability, is a precondition for adequate nutrition. Health and nutrition are closely linked in a "malnutrition-infection cycle" in which diseases contribute to malnutrition, and malnutrition makes an individual more susceptible to disease. Malnutrition is the result of inadequate dietary intake, disease or both. Disease contributes through loss of appetite, mal-absorption of nutrients, and loss of nutrients through diarrhea or vomiting. If the body's metabolism is altered, the greater the risk is of malnutrition (HNP World-Bank, 2005). Kavosi, Rostami, Kavosi, Nasihatkon, Moghadami and Heidari, (2014) assert that insufficient access to health services was associated with wasting.

Childhood malnutrition develops when primary health care functions insufficiently (UNICEF, 2008). Primary health services deliver treatment to all children and treat simple infections such as pneumonia but also malaria and diarrhea. These services must also advise and educate caretakers about care practices. Therefore, they could prevent and treat childhood disease, secure sound child development and avoid the development of child undernutrition.

A cross sectional study by Hien and Hoa (2009) on the nutritional status and potential risk factors of malnutrition in children under three years of age in Nghean (Vietnam) found that region of residence (urban or rural), ethnicity, mother's occupation, household size, mother's body mass index, number of children in family, weight at birth, time of initiation of breastfeeding, and duration of breastfeeding correlate significantly with insufficient health services and an unhealthy environment, which is contributing factors leading to child malnutrition.

Adverse environmental conditions influence child malnutrition. These conditions include the destruction of natural eco-systems, the loss of bio-diversity and climate change and increase health hazards for people and affect their nutritional status. Over-population in some areas also

reduces the ability of people to produce sufficient food from the land and this undermines food security (Blossner and De Onis, 2005).

Sanitation and hygiene are also important factors contributing to malnutrition bearing in mind that this is the primary way infections spread within the household and community (Cairncross, Hunt, Boisson, Bostoen, Curtis, Fun and Schmidt, 2010). Safe water supplies, adequate sanitation and good housing are preconditions for adequate nutrition. Inadequate sanitation and hygiene are a major contributing factor for anemia due to the link with intestinal worm infection (HNP World-Bank, 2005). The consumption of contaminated water and food, poor personal hygienic practices and unclean environment were the major contributors to malnutrition (Shafqat *et al.*, 2013; Babantunde, Olagunju, Fakayodi and Sola, 2011). A study that was conducted by Shargi, Kamran and Faridan (2011) found that the use of unhygienic latrines in the home were significantly associated with childhood malnutrition.

Household cross-sectional surveys in 2007- 2010 which were done in Somalia to investigate the contributing factors to malnutrition among children aged 6-59 months, using the height-for-age, weight-for height and mid-upper arm circumference classification of malnutrition found that infection and climatic variations were likely to be key drivers of undernourishment (Kinyoki, Berkley, Moloney, Kandala and Noor,. (2015).

The underlying causes of child nutritional status discussed in this section are influenced by the immediate causes, which are evident at household level and will be discussed in the following section of this chapter.

2.2.3 Immediate causes of malnutrition

The immediate causes of child malnutrition refer to insufficient dietary intake and disease.

2.2.3.1. Inadequate dietary intake

Inadequate diet in both quantity and quality leads to malnutrition. These two causes of malnutrition have been affirmed to potentially impair the growth, health and development of children resulting in their susceptibility to infections (World Health Organization, 2009). As a result, the WHO has recommended exclusive breast-feeding to infants with one hour after birth and for the first six months. In support of the recommendation by WHO on exclusive breastfeeding, Amsalu and Tigabu (2006) found that severe acute malnutrition in Ethiopia was independently associated with a lack of exclusive breastfeeding for the first six months of life and late initiation of complementary diet. However, Bourne (2007) reported that child malnutrition is also found during exclusive breastfeeding period. Breastfeeding practices and weaning foods are also related to malnutrition (Mizumoto, 2015). The introduction of infants to complementary diets, including diets that are deficient in proteins during weaning can result in malnutrition. During weaning, the likelihood of a child to experience malnutrition before the first year has been attributed to digestive system of a child (Boyle and Holben, 2006).

Another factor associated with dietary intake is vulnerability and poverty in a society and these are common phenomenon in several African countries. Consequently, the level of food insecurity within the household determines the nutritional status hence the immediate cause of malnutrition. This was confirmed by a study conducted by Buthelezi (2011). The study indicated that mothers of children admitted in hospital for malnutrition were generally poor and dependent of others for financial security. In most cases, the caregivers and parents make food choices for meals consumed at home. These choices are based on culture, beliefs, cost, time restraints and availability (Kelly and Patterson 2006; Kruger and Gericke 2003). Poor children have higher rates of infections, less access to adequate nutrition and are more exposed to the consequences of the lack of information that is common in their family settings. The

results of inadequate nutrition in the first year usually compromise intellectual capacity, which do not manifest until later at school age (Jones, 2006).

2.2.3.2 Disease

Disease is one of the immediate causes of malnutrition although in most cases, disease and under-nutrition occur at the same time because one can lead to the other. There is a vicious cycle between inadequate dietary intake and disease hence they both are immediate causes of malnutrition. This cycle is illustrated below (see figure 2.2), accounts for much of the morbidity and mortality of children seen in developing countries (UNICEF, 2006; WHO, 2005). This interaction is acknowledged as a main public health issue resulting in poor growth in children and reduced resistance to disease, increasing vulnerability (UNICEF, 1998). Vomiting and diarrhea come as a result of a disease and during these processes the body loses most of its nutrients. They also suppress appetite such that sick children do not eat or absorb enough nutrients resulting in malnutrition as they should, and the cycle continues as illustrated by figure 2.2 below (Brown, 2013; Kinyoki, *et al.*, 2015). This was also confirmed by a study conducted by Kolbrek (2011) and Lantana and Black (2008) confirmed a linkage between diarrhea and malnutrition.

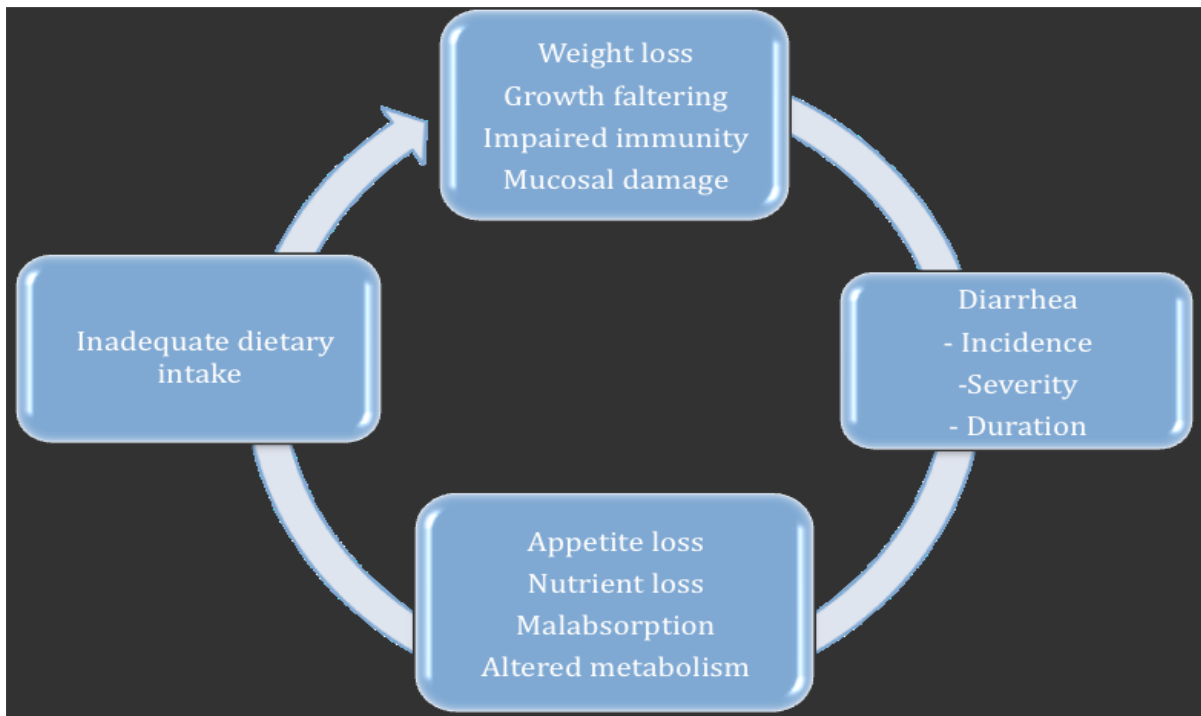


Figure 2.2 The vicious cycle of malnutrition and diarrhea

The diseases most likely to cause malnutrition are diarrhea, measles, AIDS, respiratory infections, malaria and intestinal-worms (Black *et al.*, 2008; Nhampossa, Sagaúque, Machevo, Macete, Alonso, Bassat, Manéndez and Fomadô, 2013; Kinyoki *et al.*, 2015).

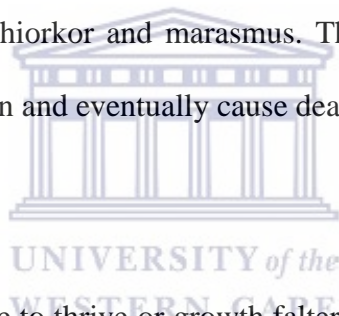
A study conducted by Kimani (2013) revealed that the child's positive human immune virus (HIV) status was a significant risk factor for malnutrition. HIV impairs the human immune system leading to increased risk of infection and reduced appetite. The immediate cause of undernutrition in people living with HIV and AIDS is therefore insufficient food intake and infection. HIV also decreases absorption and use of nutrients from the food eaten and increases the body's normal energy requirements by 10-30% in adults and 50-100% in children (UNAIDS, 2008). The longer the child remains malnourished the more the child is at a risk of infections, long term effects and other developmental deficits (Le Roux, 2010).

2.2.4 Outcomes of malnutrition

Child malnutrition is a serious problem and is responsible for the death of 3.5 million children under the age of five each year globally (Le Roux, Le Roux, Comulada, Grecko, Desmond *et al.*, 2010).

2.2.4.1 Malnutrition and death

Malnutrition is a condition that develops when the body does not get the right number of vitamins, minerals and other nutrients it needs to keep healthy (FAO, 2010). UNICEF (2011) refers to malnutrition as a medical condition whereby the individual system cannot absorb and digest nutrients from the food eaten. This condition can be mild, severe and life threatening. Malnutrition in children can take the form of stunting, wasting, or underweight (Mahgoub, *et al.*, 2006). The South African Department of Health (2008) further reported that there are other clinical diseases known as kwashiorkor and marasmus. These diseases present as result of severe protein energy malnutrition and eventually cause death.



2.2.4.2 Stunting

Stunting can also be called failure to thrive or growth faltering. This refers to low height-for-age (being too short for one's age) (Semba and Bloem, 2008). Duggan and Golden (2006) reported that stunting is an indication of chronic malnutrition and long-term insufficient diet because of a chronic energy deficiency. They further reported that a stunted child's face looks inappropriate for their size. Stunting is the first clinical sign of malnutrition (Piercecchi -Marti *et al.*, 2006). UNICEF (2009) reported that stunting affects about one in three children in Africa and it affected about 195 million children younger than five years in the developing countries. UNICEF further reported that South Africa is currently the developing country that has the 24th highest prevalence of stunting. The prevalence of stunting was the highest in children living in traditional or informal housing, with poorly educated mothers (NDoH, 2003).

2.2.4.3 Wasting

The Food Agricultural Program (2010) reported that another characteristic with child malnutrition is low weight-for-height. Children affected by this have tiny bodies, weight loss and all of this is associated with poverty and hunger. Duggan and Golden (2006) described wasting as a recent severe fat loss due to illness or severe food restriction. A child is wasted when the weight for height is less than 70% of the median and is equal to a standard deviation score of $-3SD$ (Williams, 2005). Africa and Asia are the two countries with high rates of wasting and exceed 15% (UNICEF, 2009).

2.2.4.4 Kwashiorkor

Kwashiorkor is a form of malnutrition and is caused by an unbalanced diet containing very low protein characterized by edema associated with protein deficiency. Children with kwashiorkor have a well-nourished appearance with some retention of body fat with edema present (Heimbürger, 2006). Some of the symptoms are growth retardation, skin changes, abnormal hair that is dry, brittle and easy to pull out and swollen belly (Torún, 2006). It usually occurs in children that are between one and three years of age (Berk 2001). Kwashiorkor typically starts after the child has been weaned and breast milk being replaced with a diet low in protein, although it can occur in infants if the mother is protein-deprived (Shashidhar and Grigsby, 2009). UNICEF (2009) and WHO (2008) reported that kwashiorkor usually occurs when there is a sudden change in both quality and quantity in a child's diet, especially during the weaning period.

2.2.4.5 Marasmus

Marasmus is a form of severe malnutrition that develops over a long period of time and is characterized by extreme underweight and wasting (South African Department of Health,

2008). Marasmus is a wasted condition of the body caused by a diet low in all essential nutrients (Berk 2001). It is the result of severe deprivation or impaired absorption of protein, energy, vitamins and minerals (Whitney and Rady, 2005). It is characterized by severe weight loss or wasting primarily caused by an energy deficiency. (Scrimshaw and Viteri, 2010; Spoelstra *et al.*, 2012). These authors further elucidated that at the time of weaning and signify a group of pathologic conditions associated with a nutritional and energy deficit occurring mainly in young children from developing countries.

2.2.4.6 Effects of malnutrition

This section of the chapter provides a detailed discussion of the physical and medical, social and psychological effects of malnutrition, as well as the effects of malnutrition on the mothers of malnourished children and on the health care system.

2.2.4.6.1 Physical and medical effects on the child

The effects of malnutrition in early childhood can be short term and long term. The long-term effects affect the child's cognitive and educational performance, the immune system is compromised, and the child is at risk for developing conditions such as diabetes, obesity, heart disease, high blood pressure, cancer, stroke and aging. In the short term, malnutrition affects brain development, body composition and muscle growth and the metabolic programming of glucose and lipids. (Swart, Sanders and McLachlan, 2008). Malnourishment can greatly compromise a child's immune system, rapid growth, including brain development, places high demands on nutrition (Black *et al.*, 2008). Development occurs in the first few years of life therefore, nutrient deficiencies can have major implications in young children (Musager, Hassan and Obeid, 2011). Malnutrition in the form of wasting can also the development of a weak immune system in children and may easily develop opportunistic diseases such as infections (FAO, 2010).

Bhutta, Tahmeed, Black, Cousens, Dewey, Giugliani, Haider, Kirkwood, Morris, Sachdev and Shekar (2008) reported that iodine deficiency during infancy cause mental retardation even after the deficiency has been treated. Depending on the severity of the deficiency, the consequences of malnutrition include growth stunting, kwashiorkor, marasmus and failure to thrive.

2.2.4.6.2 Social and psychological effects on the child

Malnutrition in the form of stunting causes long-term deficiencies that affect the child psychologically and delays thinking skills (Victora, Adair, Fall, Hallal, Martorell, Richter and Sachdev, 2008).). It affects physically development in terms of height and weight. In the long term, children that were stunted during their childhood had poorer educational performance and this reduced their income as adults. Poor growth is associated with delayed mental development and there is a relationship between impaired growth statuses, poor school performance and reduced intellectual achievement (De Onis *et al.*, 2000). This has been confirmed by UNICEF in De Lange (2004) who referred to the fact that poor nutrition has been implicated in delayed cognitive development; the long-term damaging effects include poor intellectual and psychological development and severe susceptibility to infections.

Ciaccio and Brophy (2000) mentioned that malnutrition may have negative social and psychological implications for children. Children who have suffered from malnutrition may develop aggressive or impulsive behavior. These children are likely to display emotional difficulties due to their growth and their appearance. It has also been reported that children who are malnourished may develop depression, anxiety, inadequacy and isolation because of the environment in which they grew. They can also develop negative self-esteem, which influences the motivation of learning; they usually fail in class and mingled with children of the younger

age than theirs. They may also become socially withdrawn which is the result of low self-esteem.

2.2.4.6.3 Effects on the mother of the malnourished child

Hospitalization of a child is stressful for parents. It causes feelings of uncertainty because they do not understand the hospital routine or the treatment regime. They may feel guilty and embarrassed and that their role as parents changes as the hospital staff takes responsibility for certain aspects of the child's care. In addition, seeing their child ill adds to their stress. It seems reasonable to expect that mothers of children who are hospitalized because of malnutrition will experience similar feelings (Graves and Ware, 1990).

A study done by Buthelezi (2011) revealed that mothers of children admitted in hospital for malnutrition were generally poor and dependent on others for financial support and as a result they did not have much control over spending patterns and were unable to take control of buying correct food for the children. Those who were getting the child support grant used the grant to support the whole family rather than a specific child and thus the money is insufficient for the needs of the whole family. It was also difficult for them to receive medical attention on time due to lack of money for the bus fare. The study showed that the mothers were very worried about coping when their children are discharged from hospital as their economic circumstances had not changed and they have little knowledge about malnutrition and how to address it.

2.3 GLOBAL POLICY AND LEGISLATION ON MALNUTRITION

Globally, there is an increase in inadequate access to food including quality or nutritious food especially in developing countries. In most cases, socio-economic status of households determines the quality of food to be accessed by its consumers.

2.3.1 Internationally.

The Global Nutrition Report (2016) confirms that malnutrition in all its forms remains a global concern, particularly affecting highly vulnerable populations in several regions of the world including the Caribbean and other developing countries. The report further confirms the urgency of collective action to combat malnutrition's cascading impact on people, communities, and whole societies. Countries had to come together to discuss commitments in handling malnutrition. All nutrition stakeholders engaged in a process of developing SMART (that is, specific, measurable, achievable, relevant, and time-bound), ambitious, and aligned commitments to end all forms of malnutrition.

This global coalition resulted in the Bipartisan Global Food Security Act of 2016. The Bipartisan Global Food Security Act is an exciting step forward in the worldwide effort to end global hunger and malnutrition in our lifetime. Hunger and malnutrition prevent millions of people in developing countries from living healthy, productive lives and stunt the mental and physical development of future generations, (GNR, 2016). The Act includes the development and implementation of a comprehensive governmental strategy to combat hunger and malnutrition in developing countries. The strategy focuses on increasing sustainable and equitable agricultural development; reducing global hunger; and improving nutrition – especially in the key first 1,000 days between a woman's pregnancy and her child's second birthday, (GNR, 2016).

FAO together with its partners will work to make food and agriculture systems more nutrition sensitive using a broad-based and inclusive approach to ending malnutrition. The Global Nutrition Report, through the monitoring of global and country commitments, will be a key pillar for enabling effective collective effort in support of the Decade of Action.

The table below shows the commitments as reported by the Global Nutrition Report (2016).

Table 2.1 Building a global commitment to nutrition

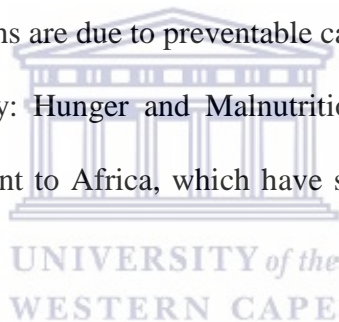
YEAR	GLOBAL COMMITMENT TO NUTRITION
2011	The United Nations releases a political declaration on non-communicable diseases (NCDs) as the outcome of a High-Level Meeting on the Prevention and Control of NCDs.
2012	At the World Health Assembly, national governments adopt a series of nutrition targets as part of the Comprehensive Implementation Plan on Maternal, Infant, and Young Child Nutrition.
2013	The governments of the United Kingdom and Brazil together with the Children’s Investment Fund Foundation co-host a summit designed to raise commitment to actions to achieve the Global Targets on Maternal, Infant, and Young Child Nutrition. At the World Health Assembly, national governments adopt a series of targets on the prevention and control of NCDs, including nutrition-relevant targets.
2014	The United Nations holds a follow-up meeting to the 2011 High-Level Meeting on the Prevention and Control of NCDs to review progress. Countries make clear commitments to, by 2015, set national NCD targets for 2025 and establish process indicators considering the nine NCD targets.
2014	Governments come together at the Food and Agriculture Organization/World Health Organization International Conference on Nutrition (ICN2) and agree on a set of 10 commitments in the Rome Declaration on Nutrition and the accompanying Framework for Action.
2015	Countries assemble at the United Nations to adopt a new nutrition target as part of the Sustainable Development Goals to, by 2030, end all forms of malnutrition.
2016	The United Nations General Assembly declares a Decade of Action on Nutrition from 2016 to 2025. The Decade of Action would translate the ICN2 commitments into coherent and coordinated actions and initiatives by all national governments, both low and high income.
2016	Proposed date for the Nutrition for Growth (N4G) Summit in Rio de Janeiro, Brazil.
2016	Japan’s leadership on nutrition is growing in advance of the 2016 Group of 7 meeting and the lead-up to the 2020 Tokyo Olympics and Paralympics.

This global coalition resulted in the Bipartisan Global Food Security Act of 2016. The Bipartisan Global Food Security Act is an exciting step forward in the worldwide effort to end global hunger and malnutrition in our lifetime. Hunger and malnutrition prevent millions of people in developing countries from living healthy, productive lives and stunt the mental and physical development of future generations, (GNR, 2016). The Act includes the development and implementation of a comprehensive governmental strategy to combat hunger and

malnutrition in developing countries. The strategy focuses on increasing sustainable and equitable agricultural development; reducing global hunger; and improving nutrition – especially in the key first 1,000 days between a woman’s pregnancy and her child’s second birthday, (GNR, 2016). FAO together with its partners will work to make food and agriculture systems more nutrition sensitive using a broad-based and inclusive approach to ending malnutrition. The Global Nutrition Report, through the monitoring of global and country commitments, will be a key pillar for enabling effective collective effort in support of the Decade of Action.

2.3.2 The African continent

WHO (2010) has estimated that in Sub-Saharan Africa, every five minutes eight children under the age of five die and these deaths are due to preventable causes perpetuated by malnutrition. The 2010 to 2015 global policy: *Hunger and Malnutrition in Developing Countries* was introduced. This policy is relevant to Africa, which have several developing countries. The focus was on:



- Improving nutrition for mothers and children in poor countries;
- Improving agricultural productivity in developing countries;
- Working with international partners to reduce hunger and malnutrition in developing countries; and
- Researching the best ways to reduce hunger and malnutrition in developing countries.

The South African Department of Health (2011) revised its strategic plan in trying to address the problem of hunger and poverty. The Food and Nutrition Security policy for the Republic of South Africa was published in August 2014. This policy outlines South Africa’s latest attempts to deal with hunger and food insecurity. This policy is accompanied by a draft implementation plan. Among the policy’s stated goals are increasing food production and distribution, as well

as supporting community-based and smallholder production. The policy cites five pillars as underlying the policy's strategies, including:

- The need for improved nutritional safety nets by state, private and non-governmental actors;
- Better nutritional education;
- Increased investment in agricultural, particularly in rural areas, to improve the efficiency of food storage and distribution networks, as well as access to inputs;
- Better market participation of emerging farmers through public-private partnerships; and
- Food security risk management.

2.3.3 Policy and legislation in Lesotho

The United Nations (2009) estimated that almost 9,000 children under the age of 5 are severely malnourished in Lesotho. In 2009, a study conducted by the World Food Program (WFP) estimated that 39 percent of children under 5 years old exhibited signs of stunted growth resulting from malnutrition. UN research shows that school attendance for young boys and girls has been decreasing in recent years as well. This is likely due to families' reliance on children to assist with increasing agricultural responsibilities.

The government of Lesotho implemented a policy on orphans and vulnerable children in addressing the issue of malnutrition in 2005. The policy, which would cost about US\$1.3 million a year for the next five years, aimed to provide free education, health services, sports and recreation facilities and set up small-scale businesses ensure economic self-sufficiency for the children and their caregivers. The policy should also coordinate other interventions for

OVC and, most importantly, monitor existing programs to ensure that they were providing quality services and targeted those most in need.

2.4 CURRENT SERVICES FOR MALNUTRITION

Different services and programs are implemented nationally in South Africa as well as international level to fight malnutrition among children under five. Efforts to fight malnutrition should include access to food and health services and good care. This should be coupled with comprehensive delivery of services across sectors since it is known that water, sanitation and access to health services are linked with child health and nutrition (Burden of Disease Research Unit, 2012).

2.4.1 Internationally

Save the Children Fund International (2000) implemented a community-based malnutrition program in the Philippines. Children from the ages of six months to five years and their caregivers were enrolled to improve their health and nutrition status. This was done by rehabilitating malnourished children, sustaining the rehabilitation and preventing future malnutrition in the community (Gupta, 2012).

The World Food Program (2000) implemented strategies to mitigate malnutrition. These strategies were sustaining the quality and quantity of food a person eats and ensuring enough health care and healthy environments. The WFP's position in combating malnutrition is to give malnourished people food and nutrients they need and also to act in time where there is threat of poverty to prevent malnutrition.

2.4.2 Services in Africa

Kasirye (2010) evaluated malnutrition programs under the support of UNICEF. The program focused mainly on central African countries namely Rwanda, Kenya, Tanzania and Uganda. The target of this program was to improve the nutritional status of children from five years and below. It was making use of only low-cost approaches like maternal education, nationwide vaccinations and nutritional supplements. Unfortunately, the results were minimal (Kasirye, 2010).

There is an on-going National Integrated Nutrition Program in South Africa. It is a comprehensive nutrition strategy that addresses malnutrition by focusing on children below six years, at risk pregnant and lactating women, and those affected by communicable and non-communicable diseases. The program also considers education and advocacy nutrition interventions among HIV infected children and nutrition promotion; disease specific nutrition treatment for preschool children, support and counselling, growth monitoring and promotion, micronutrient malnutrition control; breast feeding promotion, protection and support and contributions to household food security (Bourne *et.al.*, 2007).

The National Integrated Nutrition Program was a success as it managed to bring together essential stakeholders in ensuring that the program serves as a mechanism for communities to involve the government in developmental activities. Meaning that it has moved beyond nutrition to development-oriented interventions. However, South Africa is still having cases of malnutrition reported (Health Systems Trust, 2011).

In Ethiopia, while the situation continues to be a matter of major concern, in just a few years, the percentage of children fewer than five suffering from stunting has fallen from 57% to 44%. These results have been achieved thanks to a National Nutrition Program, which included free health services, the implementation of community nutrition programs and the introduction of a

social protection floor. Several donors worked in coordination to support this program, (Mouton, 2014).

2.4.3. Services in Lesotho

UNICEF, WFP and the Lesotho government are working to implement relief measures to combat the drastic food price increases. Efforts to adapt to irregular climate conditions are also in place. The Food & Agriculture Organization of the UN has created the Emergency and Resilience Program along with the Lesotho government to implement long term procedures such as subsistence farming and agricultural-conservation tactics. So far, the program has aided almost 20,000 farmers in Lesotho, (UNICEF, WFP, UNECOSOC, FAO, 2015).

In 2007, UNICEF helped create the Lesotho Child Grants Program that affords impoverished families 40 U.S. dollars each quarter to purchase necessities. The program helps over 10,000 families and is being expanded to aid over 15,000. In addition, the dollar amount allocated to each family will be increased by 94 U.S. dollars, (UNICEF, 2007).

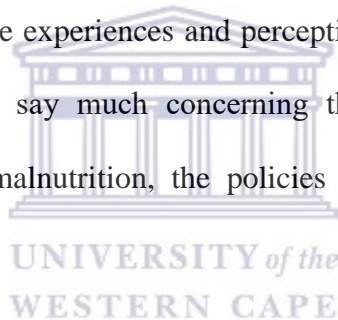
The government of Lesotho together with UNICEF, WFP, UNECOSOC, FAO, (2015) also introduced the National School Feeding Policy to provide two meals per day for students who can meet attendance requirements. For many families, the program provides an added educational and economic incentive to send young children to school. Families rely heavily upon the meals provided in schools to save money by not feeding them at home. In total, this program provides meals for over 400,000 students in Lesotho.

In the case of Lesotho, it has been demonstrated that international unity between organizations and governments can make a positive contribution. “Kopano ke matla” is an old saying in Lesotho that roughly translates to “unity is power.” When faced with such adverse conditions, the meaning and power of this phrase must not be (UNICEF, WFP, UNECOSOC, FAO, 2015).

2.5 CONCLUSION

Nutrition cannot be separated from growth, survival and development of the child. To understand malnutrition a systematic approach should be used. Therefore, employing the UNICEF framework in this study assisted greatly in focusing on many different determinants of child malnutrition because of the shared understanding provided by the framework. There is the potential to foster collaboration and bring organizations together to exchange information and therefore, strengthen the understanding of a situation and promote consensus on the priority of needs. The next chapter presents a review of literature that was studied regarding the research topic.

Lesotho is faced with the burden of child malnutrition that results in high rate of mobility and morbidity. The study explores the experiences and perception of caregivers of malnourished children. The literature doesn't say much concerning the perceptions of caregivers on malnutrition. Factors of child malnutrition, the policies and intervention strategies were addressed.



CHAPTER 3

RESEARCH METHODOLOGY

3.1. INTRODUCTION

In Chapter one some introductory comments were made regarding the research methodology. This chapter however reports in detail on the research process followed during the study. It gives a detailed interpretation of the research approach, research design, population and

sampling techniques used. In this chapter, criteria for data selection, method of data collection and data analytical techniques will be presented and discussed.

3.2 THE RESEARCH GOAL

The goal statement presents the purpose of the research. It forecasts the type of information the researcher is hoping to determine. Goals serve as validation of the study and they guide in the decisions of the designs to be utilized (Maxwell, 2009). The concepts goal, purpose and aim are often used interchangeably. A research goal implies the broader, more abstract conception of something, which is planned to do or to achieve (De Vos *et al.*, 2011). Whereas the aim can be defined as the researchers' intention or purpose, it is a purpose of what the researcher seeks to achieve (Allen, 2002). The goal of this research was to get an understanding of caregivers' perceptions on factors contributing to malnutrition. The goal derived from the research question, which the researcher wanted to answer which is: What are caregivers' perceptions on factors contributing to their children's malnutrition?

3.3 OBJECTIVES OF THE STUDY

Research objectives are the steps the researcher must take, one by one, realistically at grass-root level, within a certain time span, to attain the goal. Objectives must be an extension of the goal and relate directly to it (Fouché and De Vos in De Vos *et al.*, 2005). In the study objectives, the researcher envisioned as closely as possible what will be known when the study is complete, (Gordon, 2007).

The objectives of this study were the following:

- To explore the factors contributing to malnutrition;
- To describe the factors contributing to malnutrition; and

- To give recommendations to social workers and the multi-disciplinary team in order to address the factors contributing to malnutrition as preventative measures.

3.4 RESEARCH METHODOLOGY UTILISED DURING THE RESEARCH

Research is a systematic process to investigate and describe phenomena (Babbie, 2010). Research methodology is a process which systematically solve the research problem. It may be understood as a science of studying how research is done scientifically (Kothari, 2004; De Vos *et al.*, 2011). Research methodology is the processes that the researcher follows to answer a research question or to solve a research problem (Jonker and Pennink, 2010). It is a logic group of methods that complement one another and are appropriate to provide data and findings that will reflect the research question and suit the research purpose (Van Rensburg and Smit, 2004). The researcher systematically employed the following research methodology during the implementation of this research study.

3.4.1 The Research Approach

Research approaches are plans and the procedures for research that span the steps from broad assumptions to detailed methods of data collection, analysis, and interpretation. This plan involves several decisions including which approach should be used to a study topic, (Creswell, 2013). The nature of the information that was required in this study lead the researcher in using the qualitative approach.

A qualitative research is an approach, which identifies issues from the participants' perspectives, how they understand their experiences and the meanings and interpretations they give to them (Hennink, Hutter and Bailey, 2011). In this study the focus was caregivers' perspectives in terms of how they perceive the factors causing malnutrition of their children. The research approach seeks to understand the caregivers' social actions and events in their

natural setting of social actors (Babbie and Mouton, 2007; Babbie, 2001) by getting information expressed in words, descriptions, accounts, opinions and feelings (Walliman, 2006).

The qualitative approach allows a researcher to get an in-depth understanding in context-specific settings (Patton, 2001; Terre Blanche *et al.*, 2006). It is also an approach that permits a researcher to make an interpretation of observations, which cannot be separated, from the researcher's own background, history, context and prior understanding of the problem (Creswell, 2007; Rossman and Rallis, 2012). The researcher has a better understanding of the meanings and perspectives of the people studied, their world from their point of view, how those perspectives were shaped by, and shaped, their physical, social and cultural contexts and the specific processes that were involved in maintaining or altering those phenomena and relationships, (Maxwell, 2013). The researcher has done observations and interviews at home and has focused on the physical, social and cultural contexts, which contribute to malnutrition.

3.4.2 The Research Design

Nieuwenhuis cited in Maree (2007) refers to a research design as a strategy used to show how data will be collected and the techniques that will be used to select participants. This study employed explorative and descriptive research designs to obtain information and make a preliminary investigation into a relatively unknown phenomenon (Kothari, 2004; Mouton, 2001) focusing on the 'what' questions (De Vos *et al.*, 2011; Terre Blanche *et al.*, 2006). The researcher has used an exploratory design to explore the caregivers' perceptions regarding various factors contributing to their children being malnourished in Lesotho. This was also to gain an insight to the situation of child malnutrition (Blaikie, 2000). There is little information about how caregivers perceive malnutrition in Lesotho; therefore, the exploratory design is an



appropriate design exactly where there is little existing knowledge related to the research question available.

Descriptive design was used due to its inherent advantages for th3 ability to make accurate descriptions of phenomena (Terre Blanche *et al.*, 2006). It is an intensive examination of a phenomenon; it provides a deeper meaning and leads to a thick description of the problem (De Vos *et al.*, 2011). In this study the researcher applied descriptive research during the findings are represented in chapter four of this study.

3.4.3 Constructivism as Research Paradigm

Lincoln and Guba (2000) viewed paradigms as basic belief systems based on ontological, epistemological, and methodological assumptions. In this study, ontological view focused on adopted because it aligns with the aim of this study to get an understanding of caregivers' perceptions on factors contributing to malnutrition. The constructivist paradigm focuses on: how the caregivers had constructed reality, what were the caregivers' perceptions, truths, explanations, beliefs and worldview? What were the consequences of the caregivers' constructions for their behaviors and for those with whom they interact (Patton, 2002)?

Social constructivism begins with the premise that the human world is different from the natural, physical world and therefore must be studied differently. Hence this study intends to understand if the divergent views of the world could also have contributed to children being malnourished for example cultural beliefs and traditional medicine. This implies that what is clinically wrong could be religiously culturally correct and beliefs of people contributed to malnutrition in children. Individuals therefore seek in variety of ways to understand their immediate environment hence develop subjective meanings of their experiences (Andrews, 2012; Creswell, 2013). Social constructivism contributes to a comprehensive understanding of malnourished children, which is influenced by how the caregivers had constructed their world

and what contributed to malnutrition in their children. The complexity of the caregivers' perceptions in their real world was done by observations at their homes, which has provided information on how they interact with their environment.

Social constructivism was used interchangeably with social constructionism. Social constructivism and social constructionism are postmodern theories. These concepts are often used interchangeably. Social constructivism focuses on the various realities that individual people construct and include the different perceptions of caregivers of children with malnutrition. The ontology is relative and two people living in the same world may experience the same realities differently. Social constructionism focuses on constructing knowledge about reality and not reality itself as in constructivism. This knowledge is deeply rooted in the context, it is interpersonal, legitimate and is based on the value base and culture of both educated and sophisticated people where power is evident (Patton, 2002; De Vos *et al.*, 2013; Terre Blanche *et al.*, 2006). Social constructionism is of importance in this study because the multi-disciplinary health team and policy makers have their own knowledge base and from a position of power from which they view malnutrition.

3.4.4 Research Population

A research population encompasses the larger pool from which sampling are drawn (Terre Blanche *et al.*, 2006). It is a distinct group who can provide answers to the research question is (De Vos, *et al.*, 2011). Thus, in the current study, the population was all the caregivers of malnourished children found in Queen Mamohato Memorial Hospital at the time of data collection. This hospital as main referral hospital in the Lesotho receives patients from six health service areas in the Maseru district and from the nine districts of Lesotho.

3.4.5 Sampling

Sampling as taking a portion or a smaller number of units of a population as representatives of that total population (De Vos *et al.*, 2011). The researcher used non-probability purposive sampling (Bryman 2008). Caregivers were strategically selected that were relevant to the research question: What are caregivers' perceptions on factors contributing to their children's malnutrition? The researcher selected caregivers who were information-rich because they were caregivers of malnourished children, (Donalek and Soldwisch, 2004). This makes sampling an important part of the research if the researcher needs the best results and rich information.

Inclusion criteria in choosing the sample were:

- Caregivers of children who presented with malnutrition in out-patient department of Queen Mamohato Memorial hospital health service area in Maseru;
- Caregivers of children admitted under five years of age;
- The caregivers of patients with re-admissions
- Those that were willing to participate

The researcher approached health service areas around Maseru and the hospital where malnourished children were treated and purposefully selected participants who can give rich information. The sample size for this research study was determined by data saturation. Data saturation refers to the point where no further new information is forthcoming during interviews and focus groups (Charmaz, 2006). Saturation takes place when information no longer challenges or adds anything to what is already obtained. It is also known as sampling redundancy, as further information is increasingly redundant because it simply becomes repetitive (Creswell, 2007).

3.4.6 Data Gathering

Data collection in qualitative research includes interviews, focus group interviews and observations (Struwig and Stead, 2001). Data-gathering methods selected for this research included participant observation, observation, in-depth interviews and focus groups and field notes (Marshall and Rossman, 2010). The researcher included various methods of data collection to get rich information.

3.4.6.1 Entry into the research site

- It is important to establish personal interaction with participants especially when using the qualitative research approach. Fox and Bay (2008) propose that interaction between interviewer and participants is on a personal level, and for this to be possible the researcher had to establish a rapport with caregivers first. This was achieved by gaining entry to the research site, which involved planning and numerous preliminary contacts. Gaining access involved convincing people that the researcher had decided upon on who should be the informants that would provide information in conducting research hence the need for social skills is greatly required (Feldman *et al.*, 2003). The researcher had to negotiate consent of participant after identifying those (Terre Blanche *et al.*, 2006). The researcher visited the hospital before the respective interviews to establish contact with the hospital management. The Ministry of Health and participants, who in this case were the caregivers, were consulted. It was important for the researcher to gain the trust and acceptance of the caregivers to conduct this research (Wasserman and Clair, 2007). Gummesson (2000) proposes three different types of access, which the researcher employed during the research:
- Physical access where the researcher was able to approach the participants in the study. In this study the researcher was able to apply basic interpersonal skills and procedures such

as good appearance, verbal and nonverbal communication. The researcher has done home visits for observation and was accepted by the participants.

- Continued access refers to maintaining an ongoing physical access to the research setting. The researcher could do that by member checking as method of trustworthiness after the research was done
- Mental access refers to the researcher being able to understand what is happening and why it is happening in the investigated settings. The researcher was able to understand what was happening during the discussions. The researcher was sensitive because she did not only know the geographical settings but also understood the social and cultural aspects of the participants.

3.4.6.2 Data collections methods

More than one method of data collection was employed for this study. The researcher used semi-structured interviews with an interview schedule for patients not being hospitalized. Observations at these participants' homes were done after the interviews. Focus groups were done of participants, with children being hospitalized.

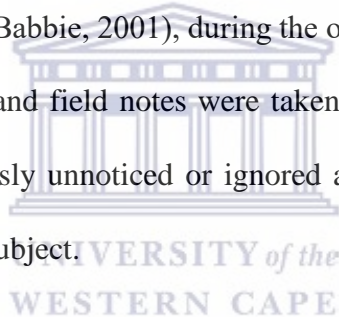
3.4.6.2.1 Semi-structured interviews

Semi-structured interviews are a combination of structured and unstructured interview (Struwig and Stead, 2001). With semi-structured interviews, the researcher had a set of predetermined questions on an interview schedule (Appendix F). Questions were open-ended to allow the participants to express themselves, elaborate and expand to ensure richness of the data (Marlow, 2011; Gill and Stewart, 2008). It gave the researcher an opportunity to gather more information while those interviewed had the opportunity to ask questions and got clarity on certain aspects of the interview process. The use of semi-structured questions allowed the

researcher to guide the interviews to get rich information. The researcher used Sesotho where the caregivers were not fluent in English and that contributed to better information on the perceptions of the caregivers. The interviews were scheduled for one hour but were terminated when data saturation was reached, and participants started repeating themselves.

3.4.6.2.2. Observations

Participant observation was also used as another method of data collection to construct knowledge about reality to supplement the interviews. The researcher decided to use this method to get a better understanding of participants' subjective reporting of what they believe and do. The researcher engaged in intermittent observation over a longer period. In this case the researcher was observing physical locations (people's personal space) how did it contribute to their children's malnutrition, (Babbie, 2001), during the observation a checklist was used to gather some of the information and field notes were taken (Appendix I). This method was useful in that it allowed previously unnoticed or ignored aspects to be seen and forced the observer to familiarize with the subject.



Participant observation was also useful for gaining an understanding of the physical, social, cultural, and economic contexts in which study participants live; the relationships among and between people, contexts, ideas, norms, and events; and people's behaviors and activities – what they do, how frequently and with whom. The challenge in using this method was that it was time-consuming, and the researcher had to document data and wrote down everything that was important while participating and observing (Terre Blanche *et al.*, 2006). The researcher, had to rely on own memory and own personal discipline expand observations, which were indicated on the checklist as soon as possible.

3.4.6.2.3 Focus group

Focus group interviews were used because they elicit perceptions, information, attitudes and ideas from a group in which each participant possessed experience of the phenomenon of the study (Stage and Manning, 2003). The aim of the researcher in using this method was to capture the caregivers' ideas and attitudes as they developed through group interaction and exchange. Two focus groups were conducted; each group consisted of eight caregivers, using a room in hospital (Appendix F) The researcher obtained permission from the hospital director to conduct this research and the room in the hospital was accessible to participants.

The researcher facilitated the discussions but focus group participants were encouraged to contribute freely (Patton, 2002). Participants were given information about the research from the information sheet and could give informed consent for the focus group. As stated by De Vos *et al.*, (2011), the facilitator (researcher) used the same interview guide as the one in semi-structured interviews to ensure that the caregivers' perceptions were explored in detail and that they were able to tell their stories. Discussions were tape-recorded. The researcher had to remind the participants of the purpose of the focus group to avoid losing time while dead-end issues were discussed, which could lead to difficulties when analyzing data (Hatch, 2010). Discussions were terminated when data saturation was reached.

3.4.6.3 Preparation of participants for interviews

The researcher attempted to create an environment of openness and trust within which the participants were able to express her or him freely. The researcher explained the purpose of the interview using the information sheet (Appendix C) to the participants and ensures them to feel free to withdraw at any stage of the interview; they were taken to a private room and the consent form was completed. Arrangements were made for participants to get counseling when necessary from the hospital psychologist. Interviews were conducted in the participants' choice of language. Permission to audio record the interview was requested from the participants

before the onset of the interviews. The researcher had to ensure that the sound of the recordings was clear. The researcher had ensured that the interviewees had planned for the interviews.

3.4.6.4 Interviewing skills used during data gathering

a) *Starting the interview*

The researcher started the interviews with casual conversation to put the participants at ease then explained the purpose of the interview (Hennink, *et al.*, 2011): and emphasized the fact that they could withdraw from the interviews at any time (Hesse-Biber and Leavy, 2010). Once the researcher was sure that the participant was comfortable the interview started. The stages of starting the interview (Terre Blanche *et al.*, 2006) were followed. A very short summary of the goal of the interview was followed by a non-threatening open-ended question to get the participant talking and feeling at ease. This was done just to get to know one another better.



b) *Use of specific interviewing skills*

Listening is the central skill during interviewing (Gillham, 2005). The researcher followed interview skills as proposed by Seidman cited in Terre Blanche *et al.* (2006). These include:

- Listen more and talk less;
- Follow up on what the participant says;
- Ask to hear more about the subject;
- Explore don't probe;
- Avoid leading questions;
- Ask open-ended questions which do not presume an answer;

- Follow up and do not interrupt;
- Keep participant focused and ask for concrete details;
- Do not reinforce the participant response; and
- Tolerate silence and allow the interviewee to be thoughtful.

c) ***Ending of the interview***

The interviews lasted for 30-45 minutes. The interviewees were asked towards the end of the interview if there was anything more that they wanted to say and were alerted toward the end of the interview that it was about to finish so that they could include anything that was left and they felt it was important (Terre Blanche *et al.*, 2006; Ritchie, Lewis, Nicholls and Ormston, 2013).

3.4.7 Pilot study

A pilot study is a trial done in preparation of the complete study. The latter is also called a ‘feasibility’ study. Pilot studies are used to identify possible problems with proposed research, using a small sample of respondents before the main study is conducted. The rationale of pilot study is to save time and money in the main study and it allows space for revising, reworking, completely abandoning the project (Terre Blanche *et al.*, 2006).

The researcher piloted the study for the orientation purposes, (Strydom, 2005) and for the pre-testing of research instruments, including interview schedule, (Compare Polit, *et al.*, and Baker in Nursing Standard, 2002; Van Teijlingen and Hundley, 2001). The pilot study included ten caregivers that were admitted with their child. They were not part of the main research. Interviews were recorded. The researcher realized that interviews seemed to be more interrogative and more probing was necessary. The questions were too leading and close ended rather than open-ended. The interview lasted for about 5 minutes. The researcher was not

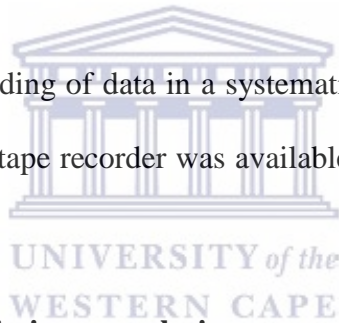
familiar with the guide and kept referring to it. The guide was more of a questionnaire rather than a guide. After the pilot study the interview schedule were revised.

3.4.8 Data analysis

Qualitative data analysis is conducted concurrently with data gathering for interpretation, make sense from it and image data (Creswell, 2009). Terre Blanche *et al.*, (2006) explain data analysis as the process of transforming the information into an answer for the original research question, while Mouton (2001) describes data analysis as classifying data into manageable themes, patterns, trends and relationships. The process of qualitative data analysis proposed by de Vos *et al.*, (2010) was used for this research. The process includes:

- **Planning for recording of data**

The researcher planned the recording of data in a systematic manner that was appropriate to the setting and participants. The tape recorder was available in working condition with spare batteries (De Vos *et al.*, 2005);



- **Data collection and preliminary analysis**

Qualitative data analysis has two approaches, the first aspect involves data analysis at the research site during data collection and the second aspect involves data analysis away from the site, following the period of data collection. Both approaches we used during this research (De Vos *et al.*, 2005);

- **Managing or organizing data**

The researcher listened to the tape recorder and transcribed the interviews and coded the participants for anonymity (De Vos *et al.*, 2005).

- **Reading and writing memos**

The researcher thoroughly read the transcriptions and compared them with the information from the tape recorder and combined it into integrated unit before breaking it into parts for analysis. The researcher further read through all the transcripts several times to become familiar with the data (Creswell, 2009).

- **Generating categories, themes and patterns**

The researcher identified significant themes, recurring ideas, language or patterns and placed them together to integrate the entire work. Corresponding perceptions and themes were arranged together in columns with headings and sub-headings, (Creswell, 2007).

- **Coding data**

After generating categories and themes these were coded marked passages in the data attentively by using quotes.

- **Testing emergent understandings**

The researcher searched through the data to challenge the understanding, searched for negative instances of patterns, and incorporated them into the larger constructs as necessary (De Vos *et al.*, 2005). This was done with an independent coder and supervisor where findings were compared.

- **Searching for alternative explanations**

The researcher identified alternative explanation, where some participants had given contradictory answers to the questions and according to the findings of the external coder.

- **Writing report**

Finally, the researcher developed representation and visualization of data (De Vos *et al.*, 2005), when the findings were done. These findings were then verified with the literature.

3.5 TRUSTWORTHINESS

A qualitative study cannot be called transferable unless it is credible, and it cannot be deemed credible unless it is dependable (Babbie and Mouton, 2001). In the practice of trustworthiness, the researcher ensured that the study was credible, transferable, dependable and conformable, (Guba and Lincoln in D’Cruz and Jones, 2006).

3.5.1 Credibility: Credibility encompasses reflexivity, observation, triangulation and member checking. In ensuring credibility; the researcher must be able to show that the data collected represent the phenomena being studied (D’Cruz and Jones, 2006). The researcher achieved this by taking field notes and used different methods for data collection, which were semi-structured interviews, observation and focus groups) The researcher has done member checking with participants during data gathering and after the data analysis.

3.5.2 Transferability: Findings cannot be generalized in qualitative research. Transferability is however possible to transfer knowledge when there are similarities in contexts (D’Cruz and Jones, 2006). Qualitative researchers can make use of thick descriptions to prove whether the research findings can be applied to other contexts, circumstances and situations (De Vos *et al.*, 2011). Transferability was achieved through thick descriptions during verbatim transcripts of interviews, focus groups, literature control and observations.

3.5.3 Dependability: Dependability is achieved when the study findings are replicated with similar participants in similar conditions (D’Cruz and Jones, 2006). The researcher achieved dependability during this research by having multi copies transcribed interviews, field notes and code and re-code procedure during the data analysis with the supervisor and external coder.

3.5.4 Confirmability: Confirmability is the degree to which the findings are relevant to the focus of the inquiry and not of the biases of the researcher. (Babbie, 2001). The findings are

based on participant's responses and not on personal motivation of the researcher. The researcher used a reflective journal to write own perspectives and asked the participants if the transcripts and findings reflected on the perceptions and understanding of participants. Direct quotations and the use of an external coder assisted with confirmability.

Reflexivity: It is important for qualitative researchers to have self-awareness, political/ cultural consciousness, and ownership of their own perspectives. The researcher must constantly reflect on his values and interests, modification that is made to the methodology and rationale behind such modifications (Patton, 2002). The researcher used a reflective journal during the study to reflect on own assumptions, perceptions, values and understanding of the phenomena to compare with those of the participants for the verification purposes that the findings are correct and not influenced by the pre-conceived ideas of the researcher, (Shank 2006).

3.6 CONCLUSION

The methodological steps of qualitative research approach were discussed in this chapter to provide an in-depth understanding to the reader of this document. The choice of methodological steps to achieve the goal and objectives of this study were also discussed. The details of research findings will be discussed in the chapter four.



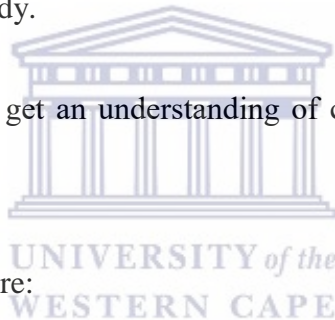
CHAPTER 4

EMPIRICAL FINDINGS OF THE RESEARCH

4.1 INTRODUCTION

This chapter presents the findings from interviews with caregivers on their perceptions of contributing factors to their children's malnutrition. The findings of this study will be discussed within the context of previously reported studies and UNICEF conceptual framework discussed in chapter one and two of this study.

The goal of the research was to get an understanding of caregivers' perceptions on factors contributing to malnutrition.



The objectives of the research were:

- To explore the factors contributing to malnutrition;
- To describe the factors contributing to malnutrition; and
- To give recommendations to social workers and the multi-disciplinary health team to address the factors contributing to malnutrition as preventative measures.

This chapter will focus on the description of factors contributing to childhood malnutrition as perceived by caregivers. Making use of non-probability and purposive sampling, the researcher strategically selected the caregivers that were relevant to the research question: What are caregivers' perceptions on factors contributing to their children's malnutrition? The researcher

interviewed ten caregivers, had two focus groups with eight participants each and did five home visits for observations (see paragraph 3.4.6.2: Data collection methods).

4.2 BIOGRAPHICAL PROFILE OF PARTICIPANTS

Table 4.1 below demonstrates the demographic details of the participants that took part in the study. It is evident from the table that the participants were female. Most of the participants were biological mothers even though there were caregivers from extended families and orphanage homes.

Table 4.1: Demographic details of participants in interviews

PARTICIPANT	RELATION TO CHILD	MARITAL STATUS	AGE	GENDER	NUMBER RE-ADMISSIONS
1	Mother	Single	20	F	2
2	Mother	Single	18	F	2
3	Mother	Single	17	F	2
4	Mother	Married	23	F	2
5	Mother	Married	26	F	4
6	Grandmother	Widowed	67	F	4
7	Caregiver	Married	55	F	2
8	Mother	Separated	30	F	3
9	Mother	Married	35	F	2
10	Mother	Married	40	F	3

Table 4.1 indicate that all participants have had admissions. The frequency of re-admissions was 100%. These respondents indicated that the re-admissions were as a result of malnutrition. The severity of these re-admissions showed that at least 40% of respondents have had more than two re-admissions, which further explain the severity of malnutrition. Biological mothers were found in 80% of the respondents and 30% of the participants were single and young mothers. Single mothers and young mothers, who are not married to the child's parent and the child not staying with both parents are social risk factors for severe malnutrition (Ayaya, Esamai, Rotich and Olwambula, 2004).

Table 4.2: Demographic details of participants in focus group discussions

PARTICIPANT	RELATION TO THE CHILD	MARITAL STATUS	AGE	GENDER	NUMBER RE-ADMISSIONS
1	Mother	Married	25	F	2
2	Mother	Divorced	30	F	2
3	Mother	Married	28	F	3
4	Mother	Single	20	F	2
5	Mother	Single	33	F	2
6	Grandmother	Widowed	57	F	3
7	Mother	Separated	36	F	2
8	Mother	Divorced	45	F	3

Table 4.2 demonstrated the demographic details of participants in focus group A. The frequency of re-admissions of 100% was similar as in table 4.1. The cause of these re-admissions was again malnutrition and provides an indication of the severity of the problem. The severity of these re-admissions showed that 63% of respondents have had two re-admissions, 88% of the respondents were the biological mothers of the malnourished children, 75% of the participants were single parents due to not being married before, divorced, separated or widowed. These findings indicate that single mothers, who are not married to the child's parent and the child not staying with both parents are social risk factors for severe malnutrition, (Ayaya *et al.*, 2004).

Table 4.3: Demographic details of participants in focus-group B discussions

PARTICIPANT	RELATION TO CHILD	MARITAL STATUS	AGE	GENDER	NUMBER OF RE-ADMISSIONS
1	Mother	Single	19	F	2
2	Mother	Single	18	F	2
3	Mother	Single	22	F	2
4	Mother	Married	18	F	2

5	Grandmother	Widowed	60	F	4
6	Caregiver	Married	35	F	3
7	Caregiver	Married	45	F	4
8	Grandmother	Widowed	50	F	3

Table 4.3 indicated that all participants have had admissions. The frequency of re-admissions was 100% as in table 4.1 and 4.2 and these re-admissions were due to malnutrition, 50% of the respondents were from 30-60 years of age and had more than two re-admissions. One would think that older people have more knowledge of childcare practices. It was found that the mothers of malnourished children were likely to be younger and their lack of maturity influences their childcare practices (Saloojee, de Maayer, Garenne and Kahn *et al.*, 2007; Kimani, 2013). The researcher decided to focus on caregivers of malnourished children during this research and it is evident that 50% of the respondents were not biological mothers.

4.3 THEMES AND SUB-THEMES FROM DATA ANALYSIS OF SEMI-STRUCTURED INTERVIEWS

Themes and sub-sub themes developed from data analysis are presented in the table 4.4. Ten themes emerged together with respective sub- themes.

THEME ONE

MOTHERS PERCEPTIONS INDICATE IGNORANCE ABOUT/OR DENYING OF DEHYDRATION/MALNUTRITION AS CAUSE OF CHILD'S ILLNESS

THEME TWO

MOTHERS ACKNOWLEDGE IMPROPER FEEDING DUE TO LACK OF FOOD AS REASONS FOR MALNUTRITION

THEME THREE

MOTHERS PERCEPTIONS ARE THAT DIARRHEA ARE A RESULT OF TRANSITION TO A NEXT STAGE IN BABY'S DEVELOPMENT

THEME FOUR

PERCEPTIONS THAT PERSONAL BEHAVIOR INCLUDING ALCOHOL AND DRUG USE DURING PREGNANCY CAUSED PREMATURE LABOR AND THUS WEAK BABY

THEME FIVE

PERCEPTIONS OF MOTHERS ABOUT HYGIENE AS POSSIBLE REASONS FOR CONTRACTING INFECTION

SUB-THEME 5.1

WASHING HANDS BEFORE PREPARING MEALS

SUB-THEME 5.2

PERCEPTIONS THAT SANITATION AND CLEAN WATER ARE NOT REASONS FOR BABY'S ILLNESS

THEME SIX

PERCEPTIONS ARE THAT WITCHCRAFT IS POSSIBLE REASON FOR CHILD'S ILLNESS

THEME SEVEN

PERCEPTIONS THAT LACK OF TRADITIONAL MEDICINE WORSEN THE PROBLEM

THEME EIGHT

PERCEPTIONS OF SOCIAL FACTORS THAT CONTRIBUTE TO BABIES' ILLNESS

SUB-THEME 8.1

PERSONAL AND FAMILY'S POOR FINANCIAL SITUATION

SUB-THEME 8.2

COST OF HEALTH SERVICE

SUB-THEME 8.3

DISTANCES FROM HEALTH FACILITIES

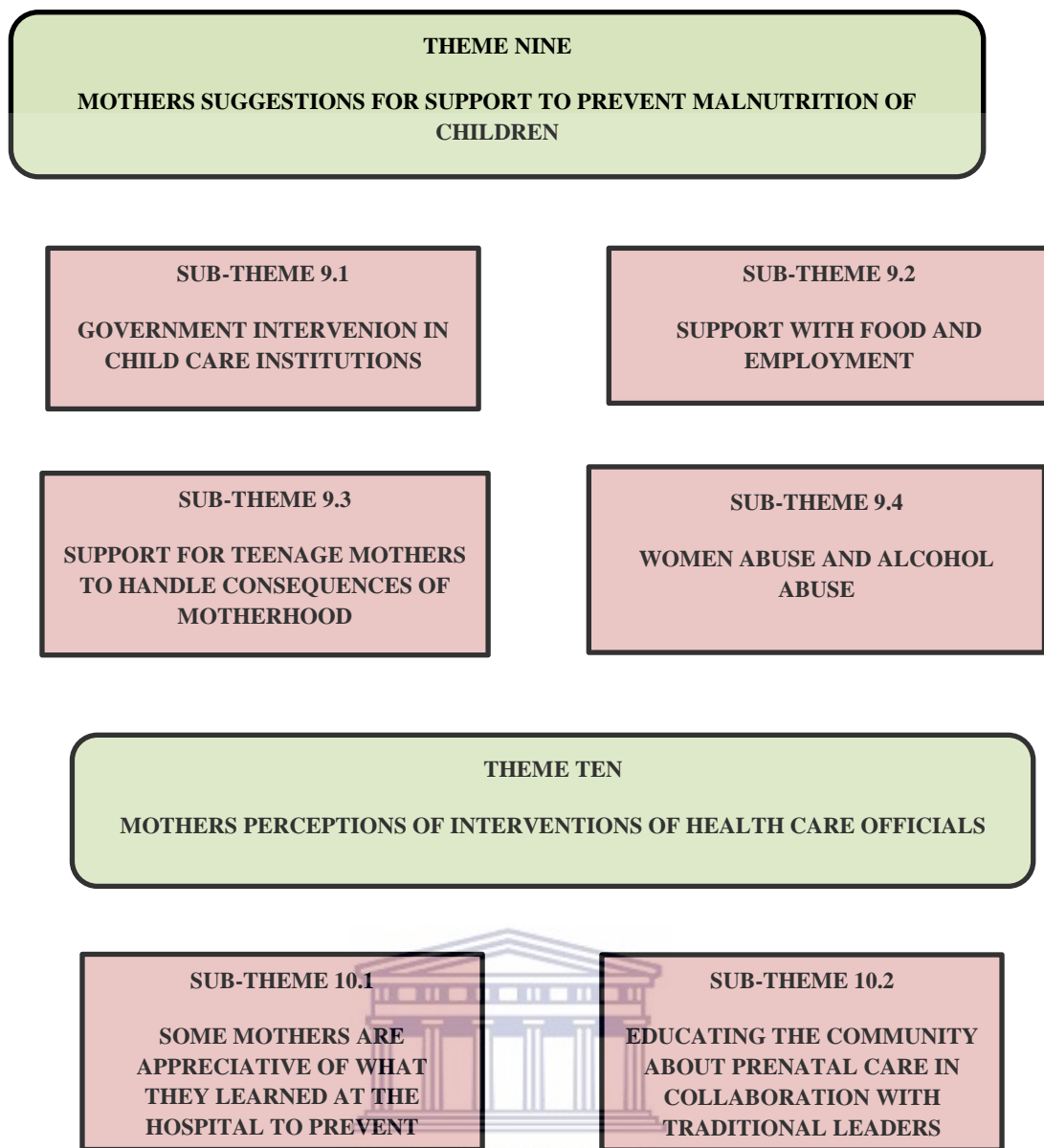


FIGURE 4.1: THEMES AND SUB-THEMES FROM DATA ANALYSIS

The themes and sub-themes are discussed in the following section of the chapter with quotations of participants and literature control.

4.3.1 Theme 1: Mothers perceptions indicate ignorance about/or denying of dehydration/malnutrition as cause of child’s illness.

While there was a general agreement in the focus group (See Table 2) that the baby’s illness was not caused by malnutrition, some mothers indicate lack of enough formula or solid foods might have contributed to the illness in the individual interviews. The following excerpts from the transcripts illustrate this:

Participant 1 (mother) - *“The doctor said my baby has malnutrition ...I am not sure since I don’t even know what it is. He asked me how I was preparing the formula and he said it was not the correct way to do it hence the baby was swollen. He also said I should give more solid foods since she is seven months no”.*

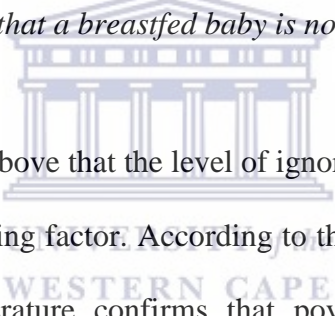
Participant 4 (mother) – *“I have never heard about a child who was sick because he/she was not well fed”.*

Participant 5 (mother) – *“I didn’t understand because he said the baby lacked good feeding, yet the baby was so big and fat. So I was really confused. He explained that he was swollen as a result of poor giving of milk”.*

Participant 6 (grandmother) – *“He admitted that the baby was fat, but he said it was not because he was healthy... I just thought the baby was gaining weight and I ignored it. I was not aware that the crying was abnormal”.*

Participant 7 (caregiver) – *“It’s normal for a child to have diarrhea and I had also been in and out of hospitals because of the same problem, so it will pass”.*

Participant 8 (mother) – *“I don’t understand the nurses saying the baby lacks nutrition. They said that the baby was not getting enough liquids and was dehydrated. How is it possible that a breastfed baby is not healthy?”*



It is evident from the quotations above that the level of ignorance and poor feeding practices of the caregivers are a serious contributing factor. According to the perceptions of caregivers a fat baby represents a healthy baby. Literature confirms that poverty, ignorance, disordered feeding, nutritional status, repeated pregnancies, parent’s separation and mother’s health are established risk factors for malnutrition (Ijarotimi, 2013; Shargi, Kamran and Faridan, 2011); Delpuech, Traissac, Martin-Prével, Massamba and Maire, 2000).

4.3.2 Theme 2: Mothers acknowledge improper feeding due to lack of food as reason for malnutrition.

Mothers agreed that lack of food was the cause of improper feeding to their children and as a result their children were malnourished. The following excerpts from the transcripts illustrate this:

Participant 1 (mother) – *“Lack of knowledge contributed because as much as I couldn’t afford that meal plan, I didn’t know about it. At least if I knew I would have made a plan here and there or even brought the baby in time to the hospital because I would be suspecting her to be sick... Looking at that meal plan, It’s not easy for me to give her all those and I am still not going to be able to, since I am a single parent who is not working”.*

Participant 2 (mother) – *“I was aware that he was sick, by getting weaker and weaker by the day but my hands were tight. Hunger, the doctor was right. It was only that I didn’t know that it could cause a serious problem like this. When I grew up, we still experienced the same hard times, yet we survived. Children of today are so weak.*

Participant 3 (mother) – *“I got that it was possible that the cause could have been improper feeding since he was never sick from anything other than the swelling at present... I said my children had never been hospitalized before”.*

Participant 4 (mother) - *“When there is little food in the house, it goes to the father, mostly protein and children will be given starch only. With my first born I had that challenge that my husband would not want to spare food for the baby mainly because he had seen his mother sparing for their father”.*

Participant 5 (mother) – *“It’s a challenge now that she is not only breastfeeding. I am able to give her soft porridge, pap and vegetables and potatoes. With her father gone is very difficult. He was the only one working and it is tough without him... Shortage of food is a major challenge more especially when I am breast-feeding. Raising the child alone is another problem; I still need someone who cares for this baby as much”.*

Participant 6 (caregiver) – *“We would spend some days without food. I am not working and so is my husband”.*

Participant 7 (caregiver) – *“We depend on donations and for the past 2 weeks it was not easy because there was no milk. We had to reduce the scopes of milk so that it could last. We have mashed potatoes and pumpkin, soft porridge, yoghurts sometimes, cereals, bean and peas. When there is not enough milk and I have to reduce the number of scopes to the volume of the water. We were told that the milk had run out and there was going to be nothing for a very long time maybe until some donations arrived. To be on the safe side we came up with this plan of economizing both for the benefit of the children and us as caregivers. At least they would have something for a longer time than having nothing at all. It was benefiting us in that what were we going to do when they cry wanting the milk? Nothing but stress. Because she had been fine all along, I think it’s the change in the preparation of milk that might have contributed to the diarrhea”.*

Participant 8 (mother) – *“Every time he cried I gave him the bottle. I don’t know times. And it depends on where I am because if I am not at home, I would not give*

him the bottle as many times as when we were at home. I have to save it till we returned home. I also give him food when we are at home, unlike when we're travelling. I am not sure how much does the grandfather gave him".

Participant 9 (mother) – *"The only thing that I didn't give him is the formula. There was nothing I could do because I could not afford it. I still wish things were otherwise so that he also could be like other babies. Breastfeeding my babies helped me a lot. As for how do I feed him, it's simple, you just guess that he might be hungry by now and you feed looking at the portion he eats".*

Participant 10 (mother) - *"She eats in the morning and then goes to play the whole day, if she is not very tired sometimes she would eat before sleeping. If she didn't go far then she would give her food at lunch".*

It is therefore confirmed by the statements above that poverty plays a huge role as far as malnutrition is concerned. It is clear from the literature that poverty is a contributing factor of malnutrition. Studies that were conducted by De Lange (2004) and Klugman (2002) confirmed that one of the contributing factors of malnutrition is poverty. UNICEF (2008) also added that poverty is the main cause of malnutrition. The Ethiopia's National Nutrition Act (2012) strongly sees poverty as a contributing factor to malnutrition.

Factors such as lack of knowledge about recommended infant and child feeding, unemployment, and health related factors are predictors of malnutrition among the under five children are also contributing factors to malnutrition (Siddiqi, 2011; Amsalu and Tiyabu, 2006; Rayhan and Khan, 2006).

4.3.3 Theme 3: Mothers perceptions are that diarrhea goes with transition to a next stage in the baby's development

Excerpts from interviews indicate that mothers believed that the child's symptoms were indicative of weaning from breast milk and/or child's transition to a next development phase.

Participant 6 (caregiver) – *"It is normal for babies to have diarrhea sometimes. They normally do when they develop from one stage to another".*

Participant 7 (grandmother) – *“Babies do have diarrhea as part of their growing up. Sometimes when they are developing from one stage to the next. And I don’t know what an infection and dehydration are ...”*

Participant 8 (mother) – *“If you have children, you will know that when you remove the baby from breastfeeding, he/she becomes swollen all over the body unless you give traditional herbs. So I thought it was the same thing”.*

Participant 9 (mother) – *“First I thought it was something she ate maybe, I got confused when it took long. I also thought it was because baby’s tummies are easily infected. Again I thought maybe she was moving from one developmental stage to the next”.*

Participant 10 (mother) – *“I still believe that stopping breast feeding can not only be the cause because if so, the herbs were supposed to have healed him”.*

It is clear from the statements above that most of the caregiver’s perceptions on the cause of diarrhea are that the transitioning of the baby from one developmental stage to the next causes it. And the only treatment to this is traditional medicine. However, literature doesn’t support the perceptions of the mothers that the next developmental stage contributes to diarrhea. Bhutta (2016) states that diarrhea in babies most often is caused by a virus that goes away on its own. It could also be caused by change in a baby’s diet or a change in the mother’s diet if breastfeeding, use of antibiotics by the baby or by the mother if breastfeeding and a bacterial infection. The baby will need to take antibiotics to get better.

4.3.4 Theme 4: Perceptions that personal behavior including alcohol and drug use during pregnancy caused premature labor and thus a weak baby

Premature babies are so fragile, prone to infections and if not well looked after, gaining weight won’t be easy. Personal behavior is very important when pregnant. The following were the perceptions of caregivers regarding why their children are malnourished.

Participant 1 (mother) - *“The other thing could be that I took too long before helping him and he had been refusing food for quite some time”.*

Participant 2 (mother) – *“She was born prematurely with a low-birth weight and it’s all my fault, If I wasn’t drinking and smoking, my baby wouldn’t be born before time”*

Participant 3 (mother) – *“If I didn’t try to do abortion, maybe the baby would still be fine. I was afraid to tell my aunt that I was pregnant because I knew she was going to be mad. My friends took me to one nurse who gave me some tablets to abort the baby and they paid her some money I’m not sure how much. I had no choice because I was also not sure who the father was”.*

Participant 4 (mother) – *“I just thought the baby was gaining weight and I ignored it. I was not aware that the crying was abnormal. I think maybe it’s because I am positive”.*

It can therefore be said from the above statements that teenage pregnancies or young motherhood are contributing factors to childhood malnutrition. They use alcohol and drugs, which affect their unborn babies because they were not aware that they were pregnant or because they are trying to relief the stress of having to face their parents. It is confirmed by literature that high levels of alcohol use during pregnancy have obvious adverse effects on fetal development (American Academy of Pediatrics, 1993; Spohr, Willms and Steinhausen, 1993).

There is consistent support of an adverse effect for heavier users of alcohol; for example, women who have more than one drink per day, on average, have an increased risk of preterm birth (Albertson and Pinkel 2003; Kesmodel, Olsen and Secher 2000). Subject to the question of the accuracy of self-reported information on alcohol consumption and some variation across studies in the definition of “heavier alcohol use,” recent data provide evidence of an association between moderate alcohol use and preterm birth (Savitz and Pastore, 1999). However, some studies reported other associations between the consumption of small amounts of alcohol and preterm birth, but this may be a result of a higher prevalence of small alcohol use among women who are more socio-economically advantaged (Albertsen *et al.*, 2003; Kesmodel *et al.*, 2000). A report from the Preterm Prediction Study, a recent large project to evaluate predictors of preterm birth, suggested a substantial reduction in the risk of medically indicated preterm birth in association with alcohol use (Meis *et al.*, 1998).

4.3.5 Theme 5: Perceptions of mothers about hygiene as possible reason for contracting infection.

Mothers' perceptions indicate ignorance about the link between personal hygiene and contracting infection. The following quotes summarize these:

Participant 1 (mother) – *“My mother knows how to sweep the house and wash dishes. What more is he talking about”?* It is

Participant 2 (mother) – *“It was my first time to hear that poor hygiene can cause infection that could lead to this condition”.*

evident from these quotations that caregivers don't perceive poor hygiene as a contributing factor to malnutrition and they know nothing about hygiene. Shafqati, Manzoor, & Abbasi, (2013), Mizumoto, Takahashi, Kinoshita, Higuchi, Bachroen and Da Silva, (2015). Babantunde, Olagunju, Fakayodi and Sola-ojo, (2011), confirm that physical environment, personal hygiene, and consumption of contaminated water and food are also important risk factors of malnutrition.



Sub-theme 5.1: Washing hands before preparing meals

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One participant acknowledges that poor hygiene could have caused the illness. Others did not really understand the relationship between hygiene of washing hands and and/or how they could have practiced good hygiene. The following excerpts illustrate:

Participant 6 (caregiver) – *“Poor hygiene, I agree, we are not coping there, there is just too much work and babies are crying. We don't have enough time to clean up. Even though I don't understand how that can cause diarrhea. As for clean water we have plenty. We have a tap in the yard and clean toilets”.*

Other participants referring to washing hands before preparing baby's meals:

Participant 1 (mother) – *“I had seen it since I arrived here and when I asked other mothers why was it that they were keen to wash hand before feeding their babies; they said they were taught that during their antenatal clinics. So, I guess for me it's not a big issue because I didn't go for clinics, therefore it's not important”.*

Participant 2 (mother) – *“This water (from a communal tap) is very cold for my mother. It would be too much of me to ask her to wash hands most of the time. And she complains that no one was helping her to get water from the well. She always told me that I don’t know the feeling of waking up around 4am to get water. But when I am around, I make sure I wash then before giving her food”.*

Participant 4 (mother) – *“There is no way I could prevent it, Like he said she might have had infection while playing, how could I stop the baby from playing? As for hygiene I don’t understand what he was talking about”.*

Participant 5 (mother) – *“I don’t even remember washing them (hands) even once. It happens at a coincidence I guess, not that I would be washing them to feed the baby”.*

Participant 6 (caregiver) – *“Not every time, because you will find that these babies are crying at the same time and I have to be fast, like I told you, it’s very hectic, there is no time for small things like those”.*

Participant 7 (grandmother) – *“Sometimes I do wash hands if there is used water, like I told you there is a shortage of water, I can’t misuse water by washing hands only. I wash the bottles once a day”.*

Participants’ perceptions about washing hands as hygienic precaution are to be interpreted with their perceptions about sanitation and clean water. Implementations that reduces diarrhea significantly were hygiene education, hand washing practices in 33%, increased sanitation in 22% and water supply improvements in 22% and 17% were introduced (Fewtrell, Kaufmann, Kay, Nanoria, Haller and Colford, 2005). Cairncross, *et al.*, (2010) found the same trend in their meta-analysis with 48% decrease in decrease of diarrhea when hands were washed with soap, 36% for good disposal of excrements and 17% with improved water sources.

Shafqat, *et al.*, (2013) conducted a study to assess the nutritional status and potential risk factors for malnutrition in children less than 5 years of age in a community. The study found that literacy of mother, her knowledge about health including washing hands and maintaining contact with health workers, boiling water, giving hydration supplement and practice of not throwing garbage at open spaces contributed significant better to child nutritional status.

Sub-theme 5.2: Perceptions that sanitation and clean water are not reasons for baby's illness

The following quotes illustrate what the participants perceive as good sanitation facilities:

Participant 3 (mother) – *“Oh yes! Everything is good. We have a village pond that caters for the whole village together with our animals. We have plenty of bushes where we toilet in peace”.*

Participant 4 (mother) – *“I took of the clothes and washed them, water is not a problem because we have a village tap that we don't pay. Even when there is no soap ... I just use water”.*

Participant 5 (mother) - *“From the well just outside the village, water is enough for everyone in this village. Even animals drink from there as well.”*

Participant 6 (caregiver) –*“We don't have toilets like here in town; it is now that our parliamentarian had promised to build everyone a toilet. In the moment and all these years' we had been using our bushes and it's not a problem because we have a lot of them, which are not far from the village. To me I would say it's better than in town where we have to pay for the sewage”.*

Participant 7 (grandmother) – *“How could water cause diarrhea? There is a well in the village where all the villagers get water. To get it clean we have to go early in the morning before animals could go because during the day animal drink there as well. We cook with it, drink, and wash and do everything with it. Besides I am also using it and I don't have diarrhea and my other children. But there might be something wrong since my mother's two neighbor's children also had diarrhea few weeks back”.*

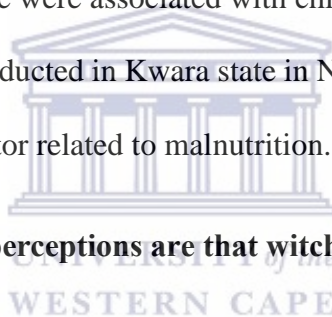
Participant 8 (mother) – *“I was faced with a challenge of preparing the bottles for him, and believe me this child can cry, so I don't have time to boil water for the formula. I just warm it up and add milk. I was told to boil the water and let it to cool down. When this child cries it's a long process to start up the fire, heat the water to the boiling point and then wait for it to cool? It's too much.”*

Participant 9 (mother) – *“From the village tank yes, even though it depends on the availability of rain. If there is no rain then it's a problem, hence we have to save the little we have. Yes I would also say the water is clean because the tank is covered but we sometimes think that the water is not clean especially when we haven't had rain for some time because there would be an outbreak of diarrhea. When there is electricity, we boil it with a big boiler so that it lasts for the whole day, but when there is not enough electricity, we use small kettles. It depends on the current situation by then whether to boil the water or just warm it up. When the babies are crying, there is no time for boiling and cooling”.*

Participant 10 (mother) – *“Access to toilet yes even though is old and not user friendly. Sometimes I prefer to go to the bush because it’s much comfortable there”.*

Literature does not support the perceptions of the participants on this point. Studies conducted by Larrea and Kawachi (2005); Pongou, Ezzati and Salomon (2006); Masiye, *et al.*, (2010) health environment and services rely on the availability of safe water, sanitation, health care and environmental safety, including shelter (Golden, Corbet, Mc Burney and Golden, 2000). Availability of pipe borne water, and latrines have been reported related to malnutrition (Mboho and Bassey, 2013; Siddiqi, Haque and Goni, 2011; El-Sayed, Mohamed, Nofal, Mahfouz and Zeid, 2001).

A study conducted by Shargi, Kamran and Faridan (2011), in Namin in Iran, adds that the use of unhygienic latrines in the home were associated with childhood malnutrition. Babatunde *et al.*, (2011) confirm in a study conducted in Kwara state in Nigeria that the presence of toilet in the household is a substantial factor related to malnutrition.



4.3.6 Theme 6: Participants’ perceptions are that witchcraft is possible reason for a child’s illness

A general theme that emerged from individual interviews and the focus group (See themes 3 and 4) are the belief that witchcraft could be a reason for the child’s illness.

A grandma as caregiver responded:

Participant 7 (grandmother) – *“But what I also noticed was that she believed that the traditional medication would help the baby if it was witchcraft.... think it’s something she ate; my mother is not observant... I think it is what she ate that she thinks contributed to the problem”.*

Participant 8 (mother) – *“Taking care of a new born is not a child’s play. But this temperature and diarrhea made me think of witchcraft. I am sure I passed a person who had used Muti. It is very dangerous to babies that they could even die. I am even thinking of asking the doctor to allow me to go home so*

that I could consult a traditional healer. This modern medication is not going to help this baby until it's late”.

There is also a strong theme emerging that traditional medicine is a help for the bewitching and also for helping to prevent illness when weaning from breast milk

3.7 Theme 7: Perceptions that lack of traditional medicine worsen the problem

Participant 1 (mother) *I thought the baby was gaining weight and I ignored it. Then the skin became shinny like and the baby started crying a lot and refusing to eat. Quickly I remember that I stopped the baby from breast milk and did not give traditional medicine, therefore the baby was not gaining weight but rather he was swollen... Had I given him the medication earlier he wouldn't had been admitted.*

Participant 2 (mother) *I always used traditional herbs and all went well. I have never brought even a single one...*

Participant 3 (mother) *I admit it might be that she was not getting enough food according to the education that I was given but I am also confused because grandma said the baby was bewitched. Grandma went everywhere with her, you know people use strong muti (traditional charms) and babies get sick if they pass near those people. (She looked serious). Diarrhea is one of the signs when a baby is bewitched. I think we should have taken this baby to a traditional healer as well...*

Participant 4 (mother) *She is very sick and I agree with the doctor on admission even though it would have been better if we consulted the traditional doctor first so that the baby could have both treatments I still think the traditional medicine could help more. Giving him back the fluids he lost yes will help a lot.*

Participant 5 (mother) *my mother in-law knows how to deliver babies; she helped me with all my children, so there was no need. She gave me traditional medication that she always gave with my other pregnancies and I did just fine. You see, that is why this child was even born before time, traditional medication works wonders, it makes it fast.*

There should be a link between traditional healers and modern health services in the African context which leads into using the cross-healing process and allowing people to have a say in they medicine without being judge (Helman, 1990).

4.3.8 Theme 8: Participants' perceptions of social issues that contribute to babies' illnesses

Sub-theme 8.1: Personal and family's poor financial situation

Some participants mention unemployment or inconsistent piece jobs:

Participant 4 (mother) - *"I'm only 23 years old. I don't have a husband, I am still staying with parents, and they are both unemployed. So, some of the instructions from the hospital are not going to be easy ..."*

Participant 5 (mother) - *"I was the only bread winner, even if I work again, how will I be able to buy all those food for my baby when I would be having so many mouths to feed? All I am saying is that I will try my best but it's not going to be easy. I will also teach my mother how to prepare the formula correctly even though it's the expensive route because it uses too much of the formula".*

Participant 3 (mother) - *"My parents died while I was still young and I had been raised by my aunt who is not employed ..."*

Participant 8 (mother) - *"I was a domestic worker in South Africa and they are paying much better as compared to here".*

Participant 2 (mother) - *"We didn't have enough food and grandpa was always shouting that we are taking all his money not leaving him with something to drink and smoke. We were many, or perhaps it was enough before I came in with another mouth to feed. We sometimes went to bed on empty stomach because there would be no food... While I was pregnant, we had several episodes where we didn't have food in the house. I think it also contributed to the unhealthy condition of the baby".*

Participant 10 (mother) - *"When we got money from piece jobs the most important things to buy was maize-meal and soap and the baby's formula".*

Participant 3 (mother) - *"We spend days without food, (tears filled her eyes) you could imagine when this baby sucks me on an empty stomach"!*

Participant 8 (mother) - *"I was told here in the hospital that I should give him eggs and vegetable together, in one meal, that won't be possible. It is a waste of food. We live on piece jobs, and you should understand it is not always that they are available".*

Participant 4 (mother) - *"I didn't have money at that time (to go to a hospital or clinic) and I had to go and borrow from the neighbor..."*

One participant report sex for money as income:

Participant 2 (mother) – *“I had many boyfriends, each knew that I was involved with the other, so there was no way I could point one..., I had to make a way of having pocket money at school... was the only solution because they would all give me something. Taxi drivers have a lot of money”*.

There is a linkage in literature of the financial challenges and malnutrition as experience by the above participants. Poverty and lack of food security are the primary reasons why malnutrition occurs in developing countries. In these countries, 10% of members of low-income households do not always have enough healthy food available to eat. Steyn further shows how a low-income result in inability to buy store food, which leads to nutritional deficiencies (Steyn, 2008).

In the case of single parenthood, when economic demand forces the mother to go look for employment, she must hire someone to look after children, take the child to a day care or to extended family member. This may result in leaving a child without the necessary psychosocial support for the good development of a child (Fiese and Winter, 2010).

Linking to the previous issues of poor income, the cost of health services and to access the services are presented as reason for not seeking medical help timely.

Sub-theme 8.2: Cost of health service

Some of the participants mentioned that the cost of health service contributed to their children's health status.

I had been in and out of this hospital but not with this baby but my other children. That is why I did not want to be admitted, I always struggled when I had to pay the hospital bill and I did not want to go through that again.

I would not be able to pay the hospital bill because I am not working and my husband is not working as

Kavosi, Rostami, Kavosi, Nasihatkon, Moghadami and Heidari, (2014) assert that insufficient access to health services was associated with wasting.

Sub-theme 8.3: Distances from health facilities

Participants also perceived that distances from health facilities are contributing to their babies' malnutrition as quoted:

Participant 1 (mother) - *“I didn't (attend prenatal clinic) because the clinic was too far”*.

Participant 2 (mother) - *“Going to the clinic is a process, it's very far and the line is just too much, you spend the whole day there”*.

Participant 3 (mother) - *“It was not easy since we come from a very far remote place, transport there is a problem. The referring clinic wanted a lot of money for their ambulance to transport us and I didn't have”*.

Participant 4 (mother) - *“I am from Thaba-Tseka (a far district) - the clinic ambulance brought me and hopefully I will go back with it. What I am not sure with is whether I am going to have to pay it or it”*.

Participant 5 (mother) - *“Mostly we ended up relying on traditional doctors because clinics are too far and there is no transport”*.

UNICEF (1998) agrees with the participants here that an essential element of good health is access to curative and preventive health services that are affordable and of good quality. Families should have a health center within a reasonable distance and center staff should be qualified and equipped to give advice and care if needed.

Health facilities are overcrowded with long queues that determined the long waiting times which limits people to gain interest to attend health facilities (Smith, Ruel, and Ndiaye 2005). Hailemariam (2014), Kavosi *et al.* (2014); Larrea and Kawachi (2005) found in their studies that poor primary health care services were linked to child malnutrition as it is perceived by the participants in this study.

4.3.9 Theme 9: Mothers suggestions for support to prevent malnutrition of children.

The plea of one participant as caregiver indicates a serious need for intervention. She is working in a childcare institution:

Sub-Theme 9.1 Government intervention in childcare institutions

The owner of the orphanage doesn't care about the lives of these children but enjoys everything that comes in their name. Or the government should take over the running of this home...last week three of the babies were admitted with the same problem, just that they are not under my care. There is a huge problem there and if nothing is done, these children are going to die. The government should intervene, that way more staff will be hired, milk should not be out of stock all the times, and trainings should be done on how they are expected to take care of these children

Meijers *et al.* (2011) confirm that malnutrition in care homes has also been linked to increased hospitalization, readmission and long-term ill health.

Sub-Theme 9.2 Support with food and unemployment

If the ministry of social development could assist us with food parcels, then it would be much better. I heard that in South Africa there is a grant for children who don't have fathers and I think we should also be given that money...

I will give the baby the medication and these supplements as instructed. I will ask my aunt to look after her while I go for domestic work in South Africa so that I can afford to give her proper food. I had that they are paying better than at factories. As long as I am still at home I won't afford food.

At this point I don't know. But if I get a job, I will make sure that my children never go to bed with empty stomach. If the government helps, I will make sure that I make use of the opportunity.

If they could assist us with start-up cash or materials. We could do farming, we have a huge land but because of poverty we don't afford to start. If we can be given seeds, manure, cows or in general farming equipment, then my problems could all be gone

Food packages do help but it is a temporary solution at least if I am working, I can afford to buy for myself now and then. You know how embarrassing it is to depend on people who are not even your relatives

Literature supports the participants of this study in the thinking that support grants could make a difference. Saloojee *et al.* (2007) in their study compared 100 malnourished children with 200 healthier children in the Limpopo Province of South Africa. It was interesting to note that in this study, only one third of the children in the malnourished group were receiving the child support grant while more than half of those in the control group were receiving it. Poorer households were thus more at risk.

Theme 9.3: Support for teenage mothers to handle consequences of motherhood.

Disrupted family relations due to teenage pregnancy with no support from biological parents are contributing factors to malnutrition.

My father told me to pack-up my clothes and leave his house ...

Other participants quoted unpreparedness for motherhood as follows:

You don't know how troublesome this baby is, she just keeps crying for no reason and I am really tired of this behavior. I wonder how my poor grandma was coping all this time. I shouted at the baby with anger that now she has to be admitted and therefore I am going to lose her job from absence.

All I was praying for was for the baby to come out dead... I didn't want this baby in the first place and now she is very sick? It's just too much for me.

Taking care of a child while you're still a child is not easy, it's so stressful, I know nothing about babies and how to take care of them. Mostly when grandma says the opposite of the nurses.

I could not go to the clinic because I didn't want people to see me even though I knew pregnant woman attend check-ups. And I was not sure if I was going to keep the baby. I was already thinking of how to get rid of the baby.

In a family where both mother and father are present, it becomes easy to raise a child since parenting styles and roles are shared. A family where a father is present may also cope better financially as both complement each other's income and by so doing reduce poverty that leads to malnutrition (Rosenberg and Wilcox, 2006).

Findings of a study conducted by Ayaya *et al.* (2004) in Kenya corresponds with the findings of this study that single mothers, young mothers, the child's living conditions such as living in a temporary house, the care-taker who was not married to the child's parent and the child not staying with both parents for the past six months are social risk factors for severe malnutrition.

Mothers of malnourished children were likely to be younger. It may be that their lack of maturity also influences their childcare practices (Saloojee *et al.*, 2007; Kimani-Murage, 2013). Single parenthood is a difficult task because one parent cannot provide effective parenting than the two parents doing it together, which can also contribute to malnutrition (Barnes and Morris, 2012; Grobler, 2012).

Theme 9.4: Women abuse and alcohol abuse

Abuse of women and alcohol are contributing factors to malnutrition as mentioned by participants as quoted as follows:

Participant 3 (mother) *My husband was abusing me physically and sexually. He would hit me and pull me by the hair if he found out that my friends visited me or I had gone somewhere. He didn't want me near people when I was ...*

Participant 3 (mother) *drunk the pain would be washed away. I was also not able to go for my prenatal care because most of the time I would be having bruises that I didn't want people to see. Again, I was not getting enough nutrition for the baby. I didn't want food most of the time.*

And yes I started drinking alcohol to drive away my stress, my friends bought me.

Saloojee *et al.* (2007) concurred that families which are controlled with violence, contributed to child malnutrition.

4.3.10 Theme 10: Participants' perceptions of the interventions of health care officials

Sub-theme 10.1: Some mothers are appreciative of what they learned at the hospital to prevent malnutrition

Some mothers were concerned about their children's health but did not know how best they could help them and they appreciated the education they got from health personnel.

Participant 4 (mother)

I am speechless, whatever it is they are giving my baby, it is working wonders. I don't complain for this long time I had been here. He had gained weight a lot. Even myself, look at how big I am now. There is hot water, food, and proper food my dear. I only get worried when I think of my other children at home thinking at how they are doing. The other problem is how I am going to pay the hospital.

Participant 5 (mother)

I have learnt a lot from my child been sick, the education from the doctors and nurses here is very important and I don't regret coming here. I didn't know that it was so important to attend the antenatal care when pregnant; I only trusted my traditional medications that my mother gave me. The nurses were also angry at me why was it that I didn't attend the clinic because I knew that I was pregnant.

Participant 6 (caregiver)

I just realized now the importance of being educated on how to take care of the child by the health care professionals. We had always relied on our elders, had I had this kind of knowledge before, motherhood would be easier. Again, I have realized the importance of taking the baby to the doctor as soon as the first signs of illness start to show.

Kavosi *et al* (2014), Mboho and Bassey (2013) and Siddiqi *et al.* (2011) also found in their studies agree that lack of education is significantly associated with undernutrition.

Theme 10.2: Educating the community about prenatal care in collaboration with traditional leaders

One participant indicated the need for working together with community leaders for educating the community on the need for prenatal care.

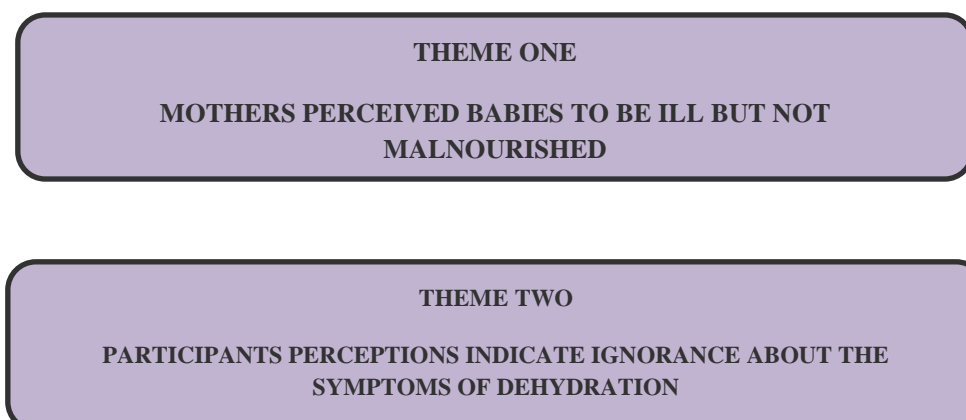
Participant 7 (grandmother) *I think the nurses should go out there to the community and ask the chiefs to do public gatherings so that they can emphasize the importance of pregnant mothers to attend the clinic. And the importance of taking our babies to the clinics the first time we see abnormal signs of illness.*

A community-based study by Shafqat, *et al.*, (2013) concluded that child nutritional status is strongly associated with the literacy of mothers, their health awareness and child rearing practices. A study that was conducted in Cameroon by Pongou *et al* (2006) supplement this by stating that maternal education and maternal health seeking behavior were associated with better child nutrition. Kavosi *et al.* (2014) in a study conducted in the Fars Province, Iran confirmed that lower maternal education is significantly associated with low height- for-age.

Participants in the focus group discussion expressed that health care practitioners should not ignore traditional healers. Concern was also expressed about the attitude of nurses or doctors when helping mothers with a malnourished child. Below are the themes from focus group discussion. The table below presents themes obtained from focus group discussions.

4.4 Themes and sub-themes from focus groups

It was worth noting that, often in group discussion, participants in the focus group generally tend supporting the dominant contributor in the discussion (an older lady) non-verbally and verbally, in contrast to individual interviews where there was more free flowing information sharing. However, several general themes/sub-themes in the focus group emerged that support the findings of the individual interviews. The themes and sub-themes from focus groups are illustrated in Figure 4.2, which follows.



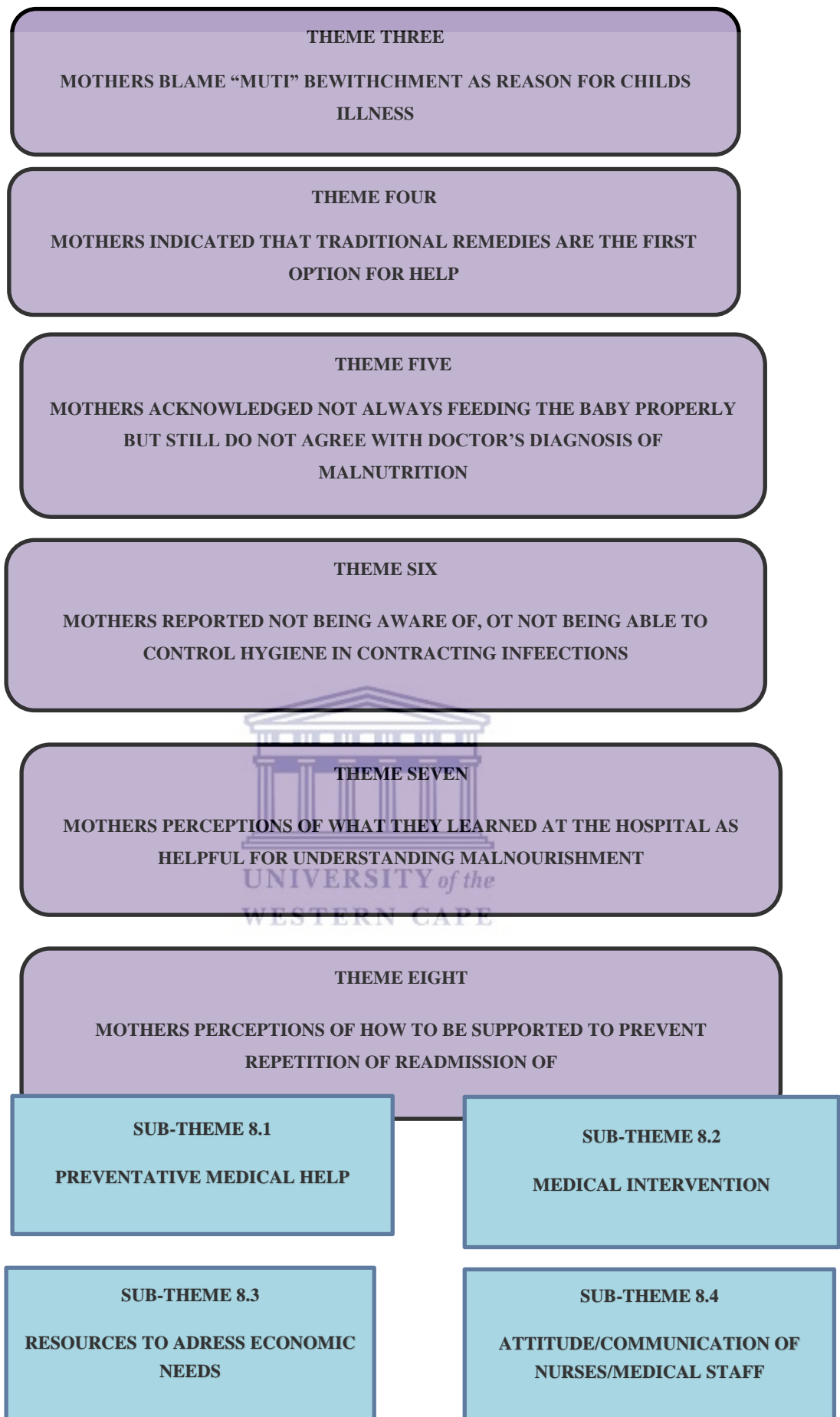


Figure 4.2: Themes and sub-themes from focus groups

The narratives of the focus group are presented to indicate the similarities to the interviews.

4.4.1 Theme 1: Most mothers perceive their babies to be ill but not malnourished

The following quotes illustrate the mothers' perceptions on their babies' illness.

“Apparently, the baby was severely wasted and dehydrated so he said. So, I am still saying that I don't know why I am here because that is not why I went to the clinic”.

“I took her to the district hospital where after checking her chest was transferred here. So, I can say my baby is here because she was diagnosed with pneumonia even though on our admission here. I was also told that the baby was not well nourished”.

“I was questioned on how I feed him because the doctor said his body lacked nutrients, not because he had severe diarrhea, but he was already weak before the diarrhea”.

“I don't agree, my baby was well and healthy before this diarrhea. He is well fed for sure. I was told the same thing as participant 3 that I don't feed the baby. I don't agree with this. My mother is very good at looking after children and there is enough food at my home. It is impossible that the baby is not fed”.

“I was told that she had an infection that caused the diarrhea. When trying to find out what caused that infection, I was told that her body was very weak, lacking many nutrients and that made her prone to infections. I don't agree with the doctor but that is how he sees it. English doctors don't agree with the traditional way of doing things”.

“It's just a sickness that I don't know what caused it but definitely not food”.

This theme is comparable with theme 1 from the interviews. Ignorance, disordered feeding, and nutritional status, are established risk factors for malnutrition (Ijarotimi, 2013; Shargi, Kamran and Faridan, 2011).

4.4.2 Theme 2: Participant's perceptions indicate ignorance about the symptoms of dehydration

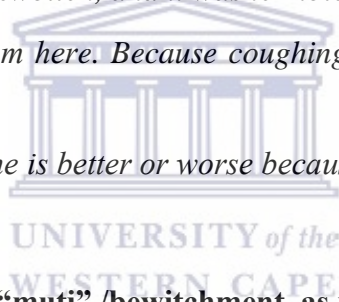
The focus group indicated that mothers did not take note of every change that was happening to their children so much that they delayed to seek for medical help. Ignorance is the contributing factor as stated by Ijarotimi (2013; Shargi, Kamran and Faridan (2011); Delpeuch, Traissac, Martin-Prével, Massamba and Maire (2000).

This is clear from the following statements:

“Everything was going on well until she started to lose appetite. I tried many tricks to help her but I failed ... she was “not sick”. After a month of this new behavior, we noticed that she was gaining weight. This surprised me a lot because it was strange. How could someone who was not eating well gain weight. After a week of this weight gaining, we noticed that actually this baby was swollen, and it was terrible”.

“I don't know why I am here. Because coughing cannot make a baby be admitted”.

“I really can't say if she is better or worse because I don't know what was wrong”.



4.4.3 Theme 3: Mothers blame “muti” /bewitchment, as reason for the child's illness.

This theme also emerged in the interviews (see theme 6). Mothers believed that witchcraft was the reason for their children's illness.

The problem started when my cousin was visiting us. She uses muti too much. That is why I went straight to the healer. It was obvious that it was too strong for her.

“I also came here because my baby had diarrhea and the color of the stool was black. In most cases when the diarrhea is black or green it's because the baby had been exposed to a strong muti. So, I did use the herbs as told for three days but unfortunately it didn't stop but rather the black color changed to a normal yellowish”.

‘Another participant alerted that hat it meant the traditional medicine thus helped to get the child out of danger’.

“That was still helpful because it meant that the baby was out of danger. He was left with normal diarrhea. If you came straight here, he wouldn't

have made it. Modern doctors can't help babies that were exposed to strong muti. When the baby is out of danger you can now take him/her to the clinic".

One participant regrets not using remedies of traditional healers because her caregivers did not teach her the use of it.

"No, unfortunately I didn't know of any, my mother passed while I was pregnant, and I am just staying with my husband, no adults close".

4.4.4 Theme 4: Mothers indicated that traditional remedies are the first option for help

Mothers indicated during the focus groups that traditional remedies are the choice when their babies are ill as mentioned in the quotations below. The same theme appears in the interviews (see theme 7).

"I was hoping it would stop. I tried some home remedies in the mean time thinking that it was just normal diarrhea in babies".

"The first thing that I did was to rush to a traditional doctor who gave me some herbs to use for three days..."

"... It is true, that is where we all start, when a baby has diarrhea. She could have died if you didn't take her to the traditional doctor before bringing her here..."

Helman, (1990) stated that traditional healers are very influential and acceptable to use in the African community.

4.4.5 Theme 5: Mothers acknowledged not always feeding the baby properly but still do not agree with doctor's diagnosis of malnourishment.

Referring to the doctors' diagnosis of malnourishment the participants mentioned the following:

"I don't want to agree to that because there is no way she couldn't be fed. It is true that I am not working and some days we go without food, but when there is food I do give her".

“I was exposed to cold staff during my pregnancy since it could be the cause of pneumonia. And I was also told that since the baby was not severely malnourished, it might have been due to the illness that the baby didn’t eat ...”

“You just have to reduce the number of spoons to actual water. That is to say, don’t follow those instructions on the tin. You can put four spoons of milk to 250ml water. In this way it takes a full month, no matter how many times a day the baby feeds. The nurses told me how to prepare it but in that way it doesn’t last. It takes two-three weeks”.

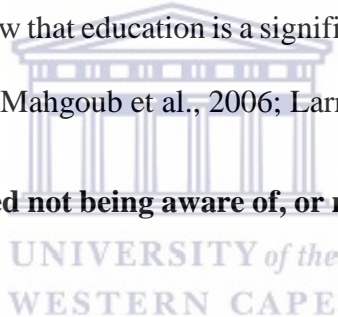
“For being severely dehydrated and wasted I don’t want to lie, I don’t know the cause. I was told that she was not fed nor given fluids. There is no where I could steal when there is nothing. I was told that my baby lacked good nutrition and therefore she was malnourished”.

“I don’t know but from what I get it’s a condition given to children that are not properly fed”.

The educational level of mothers and caregivers seemed to be a problem.

Literature supports the view that education is a significant factor in improving health status of children, (Mahgoub et al., 2006; Larrea and Kawachi).

4.4.6 Theme 6: Mothers reported not being aware of, or not being able to control hygiene in contracting infection.



The mothers mentioned the lack of knowledge and control to hygiene in the following quotations:

“The hygiene is very much compromised but I didn’t know that could be harmful to my baby”.

“There is no way I could have controlled it because we are too many in that house and know how crazy it gets when you live with other people. I had not been boiling water like the doctor suggested when I told him that I get my water from the village spring”.

It is important to improve parents, especially mothers’ education on nutrition, sanitation and common disease prevention strategies to reduce malnutrition related mortality and morbidity, (Bain, Awah, Geraldine, Kindong, Sigal, Bernard and Tanjeko, 2013). Literature proves that sanitation and hygiene are important factors

contributing to malnutrition since it is the primary way infections spread within household and community, (Cairncross, Hunt, Boisson, Bostoen, Curtis, Fun and Schmidt, 2010).

4.4.7 Theme 7: Mothers' perceptions of what they learned at the hospital as helpful for understanding malnourishment.

The mothers perceived health education in the hospital as an advantaged as indicated in the following quotations:

“After the education that I got here, I understand that if a child is not well fed, infections are easy to attack such a baby and as a result, different symptoms may occur such as diarrhea and swelling”.

“I believe that it's an illness that can attack babies whose mothers are working and have to leave them with other people who definitely are not feeding them well. Even babies from teen mothers because they don't have experience on caring for babies and how to feed them”.

“I was told that it's a state the child becomes when nutrients are not enough in the body making the baby sick as a result. Meaning that my baby was swollen as a result of insufficient nutrition. I won't agree but in Sesotho all babies become swollen as some stage when they are weaned”.

“I got that every child who has diarrhea has malnutrition”.

It is significant to note that on a question what mothers would do to prevent further malnutrition, no one in the group wanted to respond. When the question was rephrased as what support is needed to prevent the illness, the following theme and responses emerged:

4.4.8 Theme 8: Mothers' perceptions of how to be supported to prevent repetition of readmission of babies for the diagnosed illness

Sub-theme 8.1: Preventative medical help

A couple of participants contributed by mentioning that vaccines for prevention of diarrhea will be of assistance for prevention to malnourishment.

Hall, Sambu, and Berry, (2014) agree that malnutrition is crucial to address before the age of five, otherwise it will most likely prolong into adulthood. Therefore, the prevention of malnutrition is extra important regarding infants and young children.

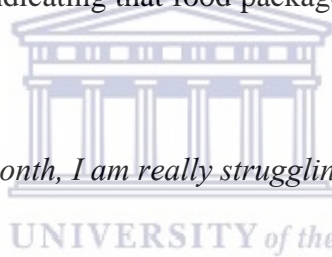
Sub-theme 8.2: Medical intervention

The participants agreed that traditional doctors should work with “English” formal doctors.

Sub-theme 8.3: Resources for addressing economic needs

Two participants responded by indicating that food packages can help with food shortages as quoted:

Yes, food packages every month, I am really struggling to have food ...



Jobs so that we don't have to go to South Africa searching for domestic work.

Food shortages contribute to malnutrition but more food is not a solution to malnutrition, (Whitehead, 2013).

Sub-theme 8.3: Attitudes/communication of nurses/medical staff

Mothers mentioned that they have a problem with the manner in which the hospital staff were treating them.

“I don't like taking my children to the clinic when they are sick. These nurses talk to us like we are age mates and like we are not human beings”.

“I can't stand to be disrespected by small girls there just because they think they went to school”.

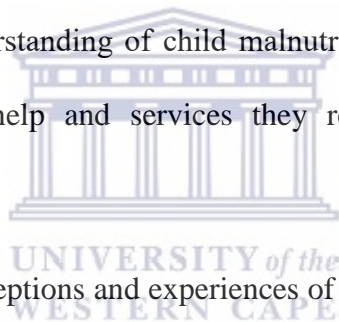
“After attending to the baby, because she was attended to as soon as we arrived here which was yesterday, they all couldn’t talk to me. It was only this morning when the doctor came to me to explain what was going”.

Caregiver’s perceptions on malnutrition are important in order to curb malnutrition effectively. It is evident from the themes that these perceptions are contributing factors to malnutrition. From the data as presented in this chapter, it is found that various factors contributing to child malnutrition in Lesotho are related to culture/tradition, poverty, and even caregivers’ level of education.

4.5 CONCLUSION

From the data presented in this chapter, it was found that caregivers’ perceptions contribute to child malnutrition in Lesotho including culture/tradition, poverty and caregivers level of education. The caregivers’ understanding of child malnutrition has been explored and their expectations in terms of the help and services they require will be indicated in the recommendations chapter.

The researcher explored the perceptions and experiences of caregivers of children admitted at a Children’s ward, Queen Mamohato. And they blamed poor socio-economic status, lack of support from the loved ones, painful hearts, very depressed, and despair. Like that was not enough, they hated having to deal with poor attitudes of the medical staff and as a result they don’t take their children for medical care. In the next and last chapter certain conclusions and recommendations based on this research study will be presented



CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter provides an overview of the study conclusions and recommendations. The researcher wanted to get an understanding of caregivers' perceptions of factors contributing to malnutrition. Caregivers' children were admitted for malnutrition in a referral hospital Maseru Lesotho.

The objectives of this research were:

- To explore the factors contributing to malnutrition, which were done during the data gathering of the research.
- To describe the factors contributing to malnutrition, which were done in chapter four where the findings of the research are discussed.
- To give recommendations to social workers, the multi-disciplinary team to address the factors contributing to malnutrition. This objective will be completed in this chapter of the thesis.

The empirical findings in Chapter four will be used in this chapter to make conclusions. Therefore, this chapter will be designed according to the themes and sub-themes in chapter four. The researcher deemed it necessary to present the themes and subthemes that were illustrated in Figure 4.1, again in Figure 5.1 in order to provide the reader with an outline of the conclusions, which will follow.

THEME ONE:

**MOTHERS PERCEPTIONS INDICATE IGNORANCE ABOUT/OR DENYING OF
DEHYDRATION/MALNUTRITION
AS CAUSE OF CHILD'S ILLNESS**

THEME TWO:

**MOTHERS ACKNOWLEDGE IMPROPER FEEDING DUE TO LACK OF FOOD AS REASONS FOR
MALNUTRITION**

THEME THREE:

**MOTHERS PERCEPTIONS ARE THAT DIARRHEA ARE A RESULT OF TRANSITION TO A NEXT
STAGE IN BABY'S DEVELOPMENT**

THEME FOUR:

**PERCEPTIONS THAT PERSONAL BEHAVIOR CAUSED PREMATURE LABOR AND THUS WEAK
BABY**

THEME FIVE:

**PERCEPTIONS OF MOTHERS ABOUT HYGIENE AS POSSIBLE REASONS FOR CONTRACTING
INFECTION**

SUB-THEME 5.1:

WASHING HANDS BEFORE PREPARING MEALS

SUB-THEME 5.2:

**PERCEPTIONS THAT SANITATION AND CLEAN WATER
ARE NOT REASONS FOR BABY'S ILLNESS**

THEME SIX:

PERCEPTIONS ARE THAT WITCHCRAFT IS POSSIBLE REASON FOR CHILD'S ILLNESS

THEME SEVEN:

PERCEPTIONS THAT LACK OF TRADITIONAL MEDICINE WORSEN THE PROBLEM

THEME EIGHT:

PERCEPTIONS OF SOCIAL FACTORS THAT CONTRIBUTE TO BABIES' ILLNESS

SUB- THEME 8.1:

**PERSONAL AND FAMILY'S
POOR FINANCIAL SITUATION**

SUB- THEME 8.2:

**COST OF HEALTH
SERVICE**

SUB- THEME 8.3:

**DISTANCES FROM
HEALTH FACILITIES**

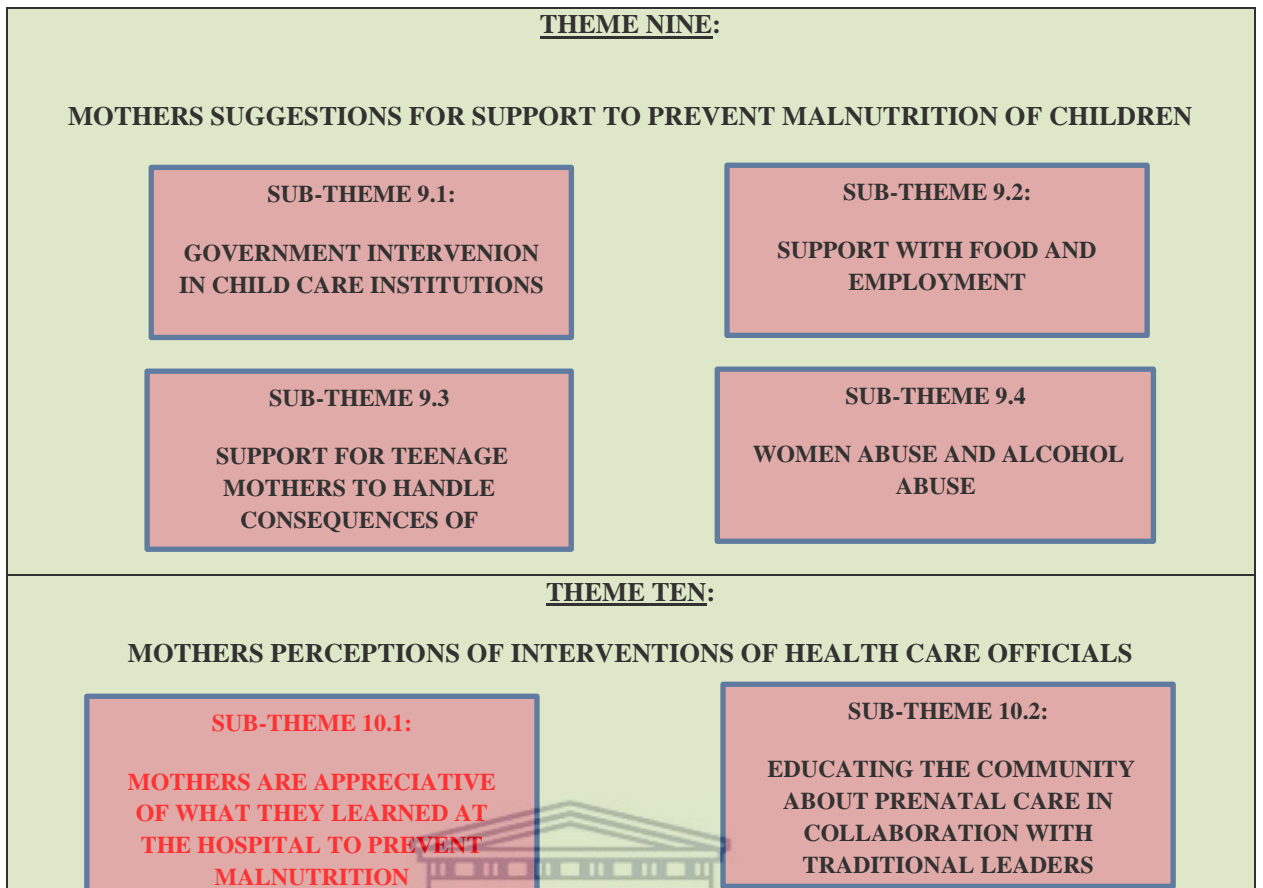


FIGURE 5.1: Themes and sub-themes from interviews

The findings of the focus groups will be presented in Figure 5.2 where themes and sub-themes will be illustrated.

<p><u>THEME ONE:</u></p> <p>MOTHERS PERCEIVED BABIES TO BE ILL BUT NOT MALNOURISHED</p>
<p><u>THEME TWO:</u></p> <p>PARTICIPANTS PERCEPTIONS INDICATE IGNORANCE ABOUT THE SYMPTOMS OF DEHYDRATION</p>
<p><u>THEME THREE:</u></p> <p>MOTHERS BLAME “MUTI” BEWITCHMENT AS REASON FOR CHILDS ILLNESS</p>
<p><u>THEME FOUR:</u></p> <p>MOTHERS INDICATED THAT TRADITIONAL REMEDIES ARE THE FIRST OPTION FOR HELP</p>

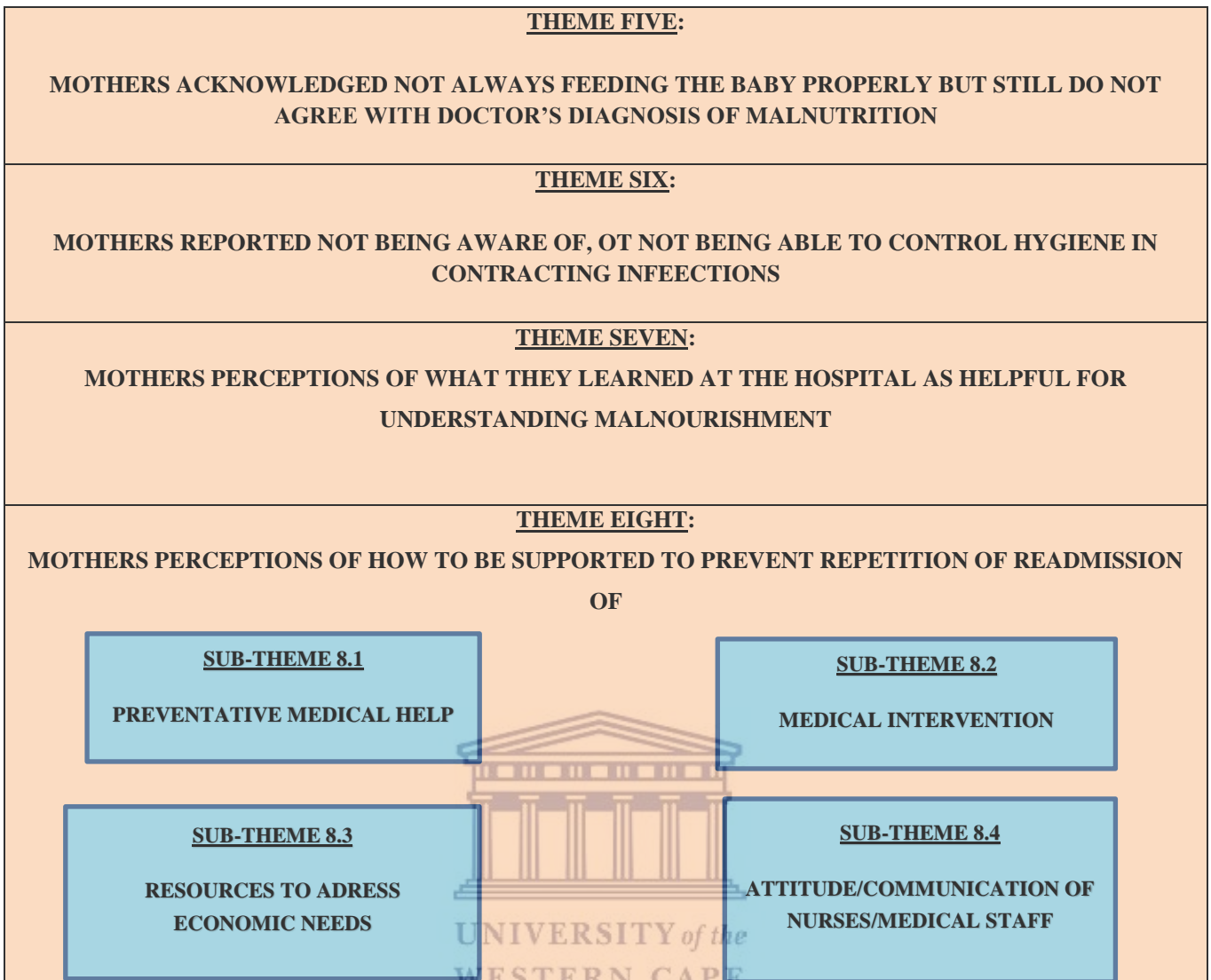


Figure 5.2: Themes and sub-themes from focus groups

The researcher will continue to discuss the conclusions according to themes and sub-themes in the chapter.

5.2 Mothers perceptions indicate ignorance about/or denying of dehydration/malnutrition as cause of child's illness.

Caregivers in both interviews and focus groups denied that malnutrition is the cause of their children's illness.

5.2.1 Conclusions

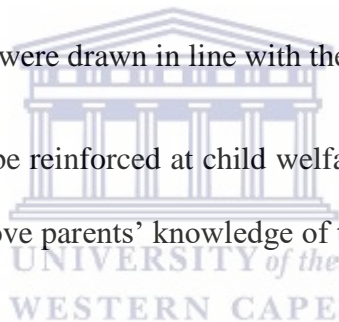
The researcher made the following conclusions from this theme:

- There is a lack of knowledge about malnutrition both in the interviews and focus group.
- There is a lack of knowledge on proper feeding practices.
- There is extreme ignorance of the important signs that the baby is ill.

5.2.2 Recommendations

The following recommendations were drawn in line with the conclusions above:

- Health education should be reinforced at child welfare clinics, health facilities and, at community level to improve parents' knowledge of the recommended infant and child feeding practices.
- A healthy mother can give birth to healthy children therefore the intervention programs for improving the nutritional status of children must focus not only on children but also on their mothers. Efforts should therefore be made to improve maternal education and women empowerment, through provision of child care information at the clinics and during home visits.
- Health facilities should make programs aiming at teaching the caregivers about important warning signs to be aware of when raising their children.



5.3 Some mothers acknowledge improper feeding due to lack of food as reason for malnutrition.

Participants of this study, both in interviews and focus groups were aware that their level of poverty was contributing to their children illness.

5.3.1 Conclusions

The researcher concludes the following from these findings:

- Most of the caregivers acknowledged that they were aware that their children were sick but there was nothing they could do to change their current situations of poverty.
- Some of the mothers complained of being difficult to raise a child alone without support from family
- Most of the caregivers acknowledged not being aware of the proper feeding but even if they were, their state of being unemployed was still going to make it very difficult for them to give their children proper feeding.
- Some of the caregivers knew the proper way of preparing the baby's milk and the correct way the baby was supposed to be fed but due to poverty they were forced to do the opposite.
- Most of the caregivers explained that they went sometimes days without food.
- Most of the mothers did exclusive breast-feeding, not because they knew of its importance or they were taught about it but because lack of food forced them to. They explained how difficult it is for them when they must start with solid food for the baby.
- Cultural practices also contributed to the problem because the little protein in the house should be kept or given to the father. The father is the most important figure in the house. Children could go without food but not the father.

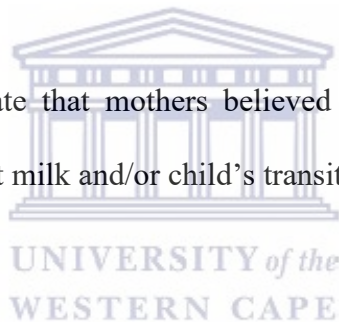
5.3.2 Recommendations

The following recommendations are proposed:

- There is a need for national and international organizations and public health officials to continue embarking on women empowerment programs to eradicate poverty among women, which would have a positive impact on the nutritional and health well-being of children.
- The government of Lesotho should provide more job opportunities for women to reduce unemployment rate, which leads to families staying in house types which may not be suitable for the health of children and ultimately drives to child malnutrition.

5.4 Mothers perceptions are that diarrhea goes with transition to a next stage in baby's life

Excerpts from interviews indicate that mothers believed that the child's symptoms were indicative of weaning from breast milk and/or child's transition to a next stage.



5.4.1 Conclusions

- Caregivers have a strong belief on traditional style of raising their children and they give the baby traditional herbs when being weaned from breast milk and failure to do this the baby will have those signs of malnutrition according to modern doctors of which it is not the case according to them.
- According to the perspective of caregivers, it is expected of a baby to have episodes of diarrhea during their development and there is nothing to worry about, it is normal.
- Some caregivers believe that it is important to start with traditional herbs first and if the problem persists then the baby could be taken to clinic.
- Doctors should allow children to be given traditional herbs even during their hospitalization to speed up the healing process.

5.4.2 Recommendations

Built on the fore mentioned conclusion, it is recommended that:

- Doctors and traditional healers should find a way of working together because of the importance of cultural and traditional practices. Doctors should sensitize traditional healers of important signs of when to refer to them.
- Doctors and health practitioners should start by appreciating people's cultural and traditional ways of doing things if they really want caregivers to cooperate with them in curbing malnutrition and other diseases.

5.5 Perceptions that personal behavior caused premature labor and thus a weak baby.

Caregivers expressed guilt because they believed they were responsible for their children ill health because of premature labor.

5.5.1 Conclusions

- Some caregivers admitted that their inappropriate behaviors of using drugs while pregnant contributed to their children being born prematurely with low-birth weights and therefore having weak immune system and being prone to infections. They mentioned that didn't know that it was wrong to use drugs when pregnant.
- Teenage pregnancies also contributed to some of the children being born prematurely since some mothers tried to abort their children in the fear of their parents and when the abortion process fails these children are born alive with low-birth weights and weak.
- Some caregivers blamed themselves for not seeking medical help in time.
- Caregivers demonstrated ignorance of important signs that the baby is not well. Most of the caregivers thought their babies were gaining weight and since there is a belief that a fat baby is the healthy baby, it made them happy, not realizing that it's swelling not gaining weight.



5.5.2 Recommendations

The previous conclusions lead to the following recommendations:

- More health education should be done especially on primary health level.
- Outreach programs should teach people in the communities about pregnancy, even before pregnancy.
- Despite Basotho being a culture sensitive nation, they should really consider allowing their children family planning services to prevent teenage pregnancies.
- Programs should be introduced in schools to teach students about all these sensitive topics that parents feel they can't discuss of their children due to their culture.

5.6 Perceptions of mothers about hygiene as possible reason for contracting infection.

Mothers' perceptions indicated ignorance about the link between personal hygiene and contracting infection.



5.6.1 Conclusions

- Some caregivers don't understand the concept of hygiene beyond sweeping of the house and washing of dishes. To them that is good enough.
- They also didn't understand how hygiene contributed to their children's illness.
- There was lack of knowledge on good hygiene due to not attending the antenatal clinics while pregnant and as result lack of education.

5.6.1.1 Recommendations

The following recommendations were drawn from the above conclusions:

- Involvement of the community, NGO's and use of media with coverage of necessary health care information and good hygiene practices can improve children's nutritional status.

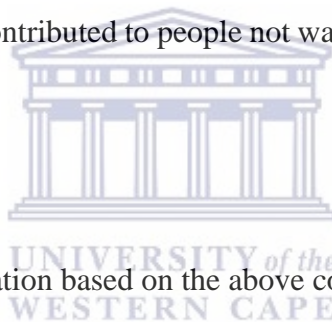
- Pregnant woman must be encouraged to attend antenatal clinics.

5.6.2 Washing hands before preparing meals

One participant acknowledged that poor hygiene could have caused the illness. Others did not really understand the relationship between hygiene of washing hands and and/or how they could have practiced good hygiene.

5.6.2.1 Conclusions

- One participant agreed that their living environment is not clean due to overcrowding but she was not aware that it could cause ill health.
- They didn't see washing of hands before preparing the baby's food as important but rather a waste of time.
- Shortages of water also contributed to people not washing hands all the time in order to save the little they had.



5.6.2.2 Recommendations

The following is the recommendation based on the above conclusions:

- The government of Lesotho should make sure that there are enough water supplies for every community because there are still places in the country without water. This would help caregivers not to compromise the health of their children by not washing hands because there is not enough and this can reduce the numbers of malnutrition due to poor hygiene.

5.6.3 Sanitation and clean water are not reasons for baby's illness

Participants' ignorance contributed to their lack of understanding of the role of sanitation and clean water to malnutrition.

5.6.3.1 Conclusions

- Caregivers were satisfied with their village pond/well that supplied both people and animals with water.
- They perceive it as a waste of time to boil water before drinking or preparing the baby's milk, since you also must wait for it to cool.
- They were also satisfied without toilets.

5.6.3.2 Recommendations

- The government must provide proper and clean water supplies for those communities that are still using ponds and springs and rivers. The quality of water will be much better even if it is not boiled.
- There are communities, which got free toilets built by the private sector, but it should be the government's responsibility to ensure that every village has toilets.

5.7 Participants' perceptions are that witchcraft is possible reason for a child's illness

Excerpts from interviews indicate that mothers believed that their children were bewitched hence their illness.

5.7.1 Conclusions

- Most of the caregivers seemed to believe in witchcraft
- The level of the mothers' education also seemed to be the contributing factor to this believe.

5.7.2 Recommendations

- Clinics should ensure educating mothers during their anti-natal visits.
- The government should ensure that child rearing education is included in the curriculum as early as primary level.

5.8 Perceptions that lack of traditional medicine worsen the problem

Mothers' perceptions were that traditional medicine had always been the best in treating most of the baby's illnesses.

5.8.1 Conclusions

- Far distances to health facilities contributed into caregivers resorting to traditional medicines.
- Education from grandmothers and great grandmothers also contributed to the use of traditional medicine.

5.8.2 Recommendations

- The government should make health facilities accessible
- Education should be done on the good and bad traditional medicines.

5.9 Participants' perceptions of social issues that contribute to babies' illnesses

5.9.1 Personal and family's poor financial situation

Unemployment or inconsistent temporary employment contributed to the poor financial situation in families. This led to most mothers leaving to South Africa in search of employment and in the process children are left with relatives who are unable to look after them.

5.9.1.1 Conclusions

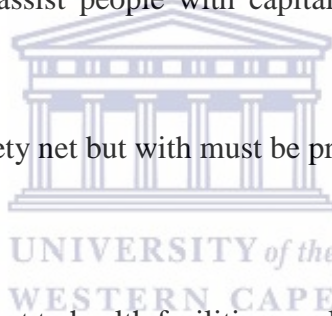
These are the conclusions drawn from the above theme:

- The caregivers explained that it will be difficult for them to implement health education due to unemployment.
- There are sometimes only one person working and contributing financially, which is insufficient for the family and the baby will not get the requirements needed.

- Biological mothers work in South Africa due to a lack of unemployment and leave their children with aged grandmothers who can't take good care of the children and are mostly ignorant with the signs of illness. They also have strong beliefs on traditional healers.
- Most caregivers lived from temporary employment with little remuneration.
- One participant reported that she is a sex worker because that is the only source of income.

5.9.1.2 Recommendations

- The government with collaboration with the private sector should develop projects in communities, which are sustainable and assist with an income.
- The government should assist people with capital for subsistence farming or even commercial farming.
- Social grants can be a safety net but with must be provided after proper assessments.



5.9.2 Cost of health service

Lack of income and expenses to get to health facilities resulted in malnutrition of children.

5.9.2.1 Conclusion

Caregivers' delay bringing children to the hospital because they cannot afford to pay the hospital bills when discharged which result in the poor conditions of their children.

5.9.2.2 Recommendations

- Primary health care is already a free service in Lesotho but the government should provide free hospital services. Children are referred to the hospital from primary health services due to the severity of malnutrition, which need special care.
- Free mobile clinics that can visit the villages on weekly bases and government and private sector can have a partnership to develop and maintain these services.

5.9.3 Distances from health facilities

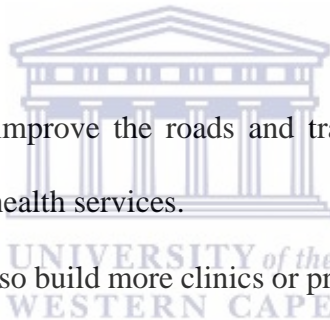
Distances from health facilities, especially from rural areas are vast and contributed to a lack of health services for children with malnutrition.

5.9.3.1 Conclusions

- The reason why some mothers didn't attend the clinic while pregnant is because the clinics were too far, not easy to reach and this contributed to their lack of important information.
- Most caregivers reported that they visited traditional doctors because clinics were too far and there is no transport due to bad conditions of the roads.

5.9.3.2 Recommendations

- The government should improve the roads and transport, which are a problem for caregivers when seeking health services.
- The government should also build more clinics or provide mobile clinics in rural areas.



5.10 Mothers suggestions for support to prevent malnutrition of children

The plea of one participant as caregiver indicates a serious need for intervention. She is working in a childcare institution.

5.10.1 Government intervention in childcare institution

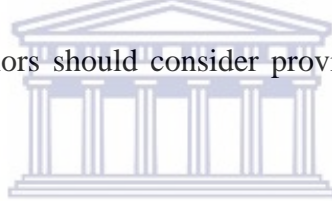
Childcare institutions in Lesotho are privately owned but the government provide subsidies every year to assist with the costs.

5.10.1.1 Conclusions

- Some owners of these institutions don't really care about the health and wellbeing of these children but are interested in profit from donations and subsidies from the government.
- The hospital experienced many admissions of malnourished children from these institutions.

5.10.1.2 Recommendations

- The government authorities must do regular visits to these institutions to evaluate and monitor the living conditions of these children.
- The government and donors should monitor services and use of their funds.
- The government should have its own administered institution.
- The government and donors should consider providing goods and services to these institutions.



5.10.2 Support with food and unemployment

Unemployment contributes to a lack of food, which result in child malnutrition.

5.10.2.1 Conclusions

- Some caregivers wanted the government to give them with food parcels and monthly grants just as in South Africa but others were aware that food parcels are a temporary solution and they wanted more sustainable solutions.
- Some caregivers were willing to get employment in South Africa, but this will not solve their problems because their children would be left with other people and they are not sure of the quality of care, which children will get.
- Employment was seen as the only solution to some caregivers.

- Some caregivers wanted support with farming material or equipment because they had land where they could produce their own food.

5.10.2.2 Recommendations

Recommendations as per the conclusions above:

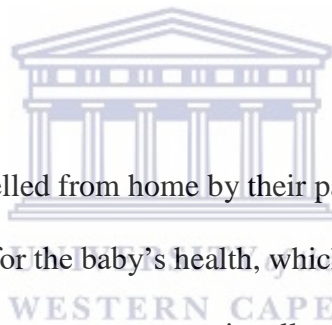
- The government should provide food parcels as a temporarily solution while planning more sustainable programs to empower women and communities.
- Land and farming assistance should be given to people who want to produce food.

5.10.3 Support for teenage mothers to handle consequences of motherhood.

Disrupted family relations due to teenage pregnancy and no support from biological parents resulted in child malnutrition.

5.10.3.1 Conclusions

- Teenage mothers get expelled from home by their parents and end up staying in not so conducive environments for the baby's health, which contributed to malnutrition.
- These teenage mothers were not emotionally and mentally prepared for the motherhood, which affected them and contributing to difficulty coping with the baby.
- The mothers who had failed abortions experienced depression. They didn't want their babies in the first place and it was difficult for them care for the baby and give the children the love and care necessary for their development. This contributed to a lack of bonding between the mother and baby, which is very crucial in the development of a child.
- It was also a challenge for teenage mothers to attend ante-natal clinic because they didn't want people to notice their pregnancy and this contributed to more negative consequences for the baby because of a lack knowledge to care for the baby.



5.10.3.2 Recommendations

The following recommendations are suggested:

- The government should create policies and legislation that forces fathers of these babies to take part in the raising them because they deserve to have both parents and live in a loving and stable home irrespective of their age. This can also contribute in reduction of the numbers of teenage pregnancies.
- Family planning should be compulsory for teenagers.

5.10.4 Women abuse and alcohol misuse

Abuse is a factor, which result in pre-term babies. Women are abused during pregnancy and the abuser but also the mother involves alcohol.

5.10.4.1 Conclusions

- Abuse from husbands was a common phenomenon from participants.
- Caregivers were physically and sexually abused. This resulted in them abusing alcohol to cope with stress without knowing the damage, which is caused to their unborn babies.
- Mothers don't attend antenatal clinics because they were ashamed and scared because of the bruises and other signs of abuse.

5.11 Participants' perceptions of the interventions of healthcare officials

Participants in the focus group articulated that health care practitioners should not ignore traditional healers. Concern was expressed about the attitude of nurses or doctors when helping mothers with a malnourished child. Below are the themes from focus group discussion illustrated in Figure 5.2.

5.11.1 Some mothers are appreciative of what they learned at the hospital to prevent malnutrition.

The hospital provides a variety of health services from a multi-disciplinary health team to assist the mothers with their babies' conditions.

5.11.1.1 Conclusions

- Some caregivers were really satisfied with the treatment their children were getting even though they were afraid that they were going to come back after discharge because there is no food at home.
- They appreciated the health education they got from the health team and got a clear understanding between the role of a traditional healer and a doctor, which didn't prohibit them from seeing a traditional healer.

5.11.1.2 Recommendations

- Health personnel should be trained on good communication skills and customer care and must be sensitive to the cultural and traditional beliefs of the caregivers.



5.11.2 Educating the community about prenatal care in collaboration with traditional leaders

One participant indicated the need for working in partnership with community leaders to educate the community on the need for prenatal care.

5.11.2.1 Conclusions

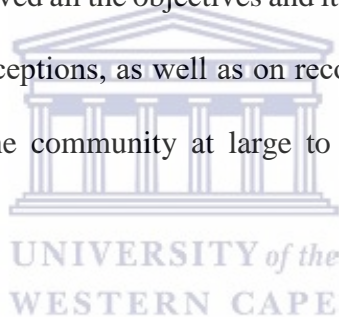
- Caregivers wanted nursing in their community and the chiefs to have public gatherings for health education where the importance health services for pregnant mothers and babies are emphasized.

5.11.2.2 Recommendations

- Health education for women in communities should be prioritized.
- Preventative must compliment other health strategies for successful malnutrition reduction.

5.12 CONCLUSION

With reference to the outcomes of the study, it is evident that the care the child gets from his/her caregiver impacts hugely on the health of a child. It can also be concluded that; the contributing factors to child malnutrition are based on the perceptions of caregivers on basic, underlying and immediate causes of child malnutrition, hence to make treatment and prevention a success, one has to consider the UNICEF conceptual framework in developing suitable intervention programs. The research has achieved all the objectives and it will be to disseminate information from findings on caregivers' perceptions, as well as on recommendations to the government, private sector, caregivers and the community at large to reduce the alarming numbers of malnourished children.



BIBLIOGRAPHY

Abate, G., Kogi-Makau, W. & Muroki, N.M. (2001) Hygiene and health-seeking behaviors of households as predictors of nutritional insecurity among preschool children in urban slums in Ethiopia – the case of Addis Ababa. **South African Journal of Clinical Nutrition**, Vol. 14, no. 2, pp. 56 – 60.

Abdul Arif Khan, A.A. (2008) Prevalence of dental caries among population of Gwalior (India) in relation of different associated factors. **European Journal of Dentistry**, 2; 81-85

Abraham, E. N. (1989) **The science of nutrition and its application in clinical dentistry**. 2nd edition, Philadelphia: W.B. Saunders Company.



Albertson, D. G. & Pinkel, D. (2003) Genomic microarrays in human genetic disease and cancer. **Hum Mol Genet**, 12 Spec No 2, R145-152.

Allen, R. (2002) **Oxford Students Dictionary**. India: Oxford University Press.

Almond, D. Bhashkar, M. (2011), Health Capital and the Prenatal Environment: The Effect of Ramadan Observance during Pregnancy. **American Economic Journal: Applied Economics**, 3: 56-85.

Thomas K. McInerney, MD, FAAP, Henry M. Adam, MD, FAAP, Deborah E. Campbell, MD, FAAP and Deepak M. Kamat, MD, PhD, FAAP (2009) American Academy of Pediatrics: **The Pediatrician and the "New Morbidity**, Volume 92 / Issue 5.

Amsalu, S. & Tigabu, Z. (2006). Risk factors for severe acute malnutrition in children under the age of five: A case control study. **Ethiopian Journal of Health Development**, 22(1), 21-25.

Antai, D., Ghilagaber, G., Wedrén, S., Macassa, G. & Moradi, T. (2009) Inequities in under-five mortality in Nigeria: Differentials by religious affiliation of the mother. **Journal of Religion and Health**, 48(3), 290–304.

Ayaya, S.O., Esamai, F.O., Rotich, J. & Olwambula, A.R. (2004) Socio-economic factors predisposing under five-year-old children to severe protein energy malnutrition at the Moi Teaching and Referral Hospital, Eldoret, Kenya. **Eastern African Medical Journal**, August, Vol. 81, No. 8, pp. 415-421.

Babantunde, R.O., Olagunju, F.I., Fakayodi, S.B. & Sola-ojo, F.E. (2011) Prevalence and determinants of malnutrition among under-five children of farming households in Kwara State, Nigeria. **Journal of Agricultural Science**, 3(3), 173-181.

Babbie, E. & Mouton, J. (2001) **The social practice of social research**. Cape Town: Oxford University Press.

Babbie, E. (2007) **The practice of social research**. 11th Edition. Belmont: Thomson Wadsworth.

Babbie, E. (2010) **The practice of social research**. 11th Edition. Belmont: Thompson Wadsworth.

Bain, L.E., Awah, P.K., Geraldine, N., Kindong, N.P., Sigal, Y., Bernard, N. & Tanjeko, A.T. (2013). Malnutrition in Sub-Saharan Africa: burden, causes and prospects. **The Pan African Medical Journal**, 15:120.

Barrett, C. B. (2010). Measuring food insecurity. **Science**, 327(5967), 825-828.

Berk, L. E. (2001). **Development through the life-span**. 2nd Edition. Boston: Allyn and Bacon.



Bhutta, Z. A., Ahmed, T. Black, R. E., Cousens, S., Dewey, K., Giugliani, E., Haider, B.A., Kirkwood Morris, S.S., Sachdev, H.P.S. (2008). What works? Interventions for maternal and child under 5 - nutrition and survival. **The Lancet**, 371: 417-440.

Bhutta, Z. A. Acute gastroenteritis in children. In: Kliegman, R.M., Stanton, B.F., St. Geme, J.W., Schor, N.F., (2016) Eds. **Nelson Textbook of Pediatrics**, 20th ed. Philadelphia, PA: Elsevier.

Black, R.E., Allen, L.H., Bhutta, Z.A., Caulfield, L.E., De Onis, M., Ezzati, M. & Maternal and Child Undernutrition Study Group. (2008). Maternal and child undernutrition: global and regional exposures and health consequences. **The Lancet**, 371(9608), 243-260.

Blaikie, N. (2000). **Designing social research: the logic of anticipation**. Massachusetts: W.B. Saunders Company.

Bless, C., Smith, C.H. & Kagee, A. (2006) **Fundamentals of social research methods: An African Perspective**. 4th Edition. Cape Town: Juta and Co, Paarl Print.

Boles, S.M. & Miotto, K. (2003) Substance abuse and violence: A review of the literature. **Aggression and violent behavior**, 8(2):155-174.

Blössner, M. & de Onis, M. (2005) **Malnutrition: quantifying the health impact at national and local levels**. Geneva: World Health Organization (WHO Environmental Burden of Disease Series, No. 12).

Bourne, L.T., Hendricks, M.K., Marais, D. & Eley, B. (2007) Addressing malnutrition in young children in South Africa. Setting the national context for pediatric food-based dietary guidelines. **Maternal and Child Nutrition**, 3: 230-238.

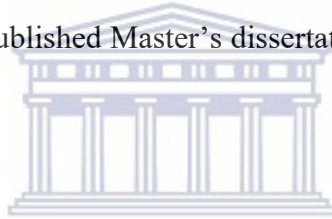
Boyle, M.H., Racine, Y., Georgiades, K. (2006) The influence of economic development level, household wealth and maternal education on child health in the developing world. **Social Science and Medicine**, 63:2242-2254.

Brown, I. (2013) The pathology of malnutrition and malabsorption, in Morson and Dawson's gastrointestinal pathology. 5th Edition. Oxford:Wiley-Blackwell.

Bryman, A. (2008) **Social research methods**. 3rd Edition, New York: Oxford University Press.

Burden of Disease Research Unit. (2012) **Under five mortality stats in South Africa: Shedding some light on the trend and causes, 1997- 2007.** www.mrc.ac.za [Accessed on 2/11/2012].

Buthelezi, N. (2011) **Understanding malnourished children at a public hospital in Durban: perspectives of caregivers.** Unpublished Master's dissertation University of KwaZulu-Natal: Durban.



Cau, B., Sevoyan, A. & Agadjanian, V. (2013) Religious affiliation and under-five mortality in Mozambique. **Journal of Biosocial Science**, 45(3), 415–429. CrossRefPubMedGoogle Scholar.

Ciaccio, L. & Brophy, L. (2000) A teacher's chance for immortality. **The education digest**, 65,6, 44-8.

Cairncross, S., Hunt, C., Boisson, S., Bostoen, K., Curtis, V., Fun, I.C.H., & Schmidt, W.P. (2010). Water, Sanitation and Hygiene for the Prevention of Diarrhea. **International Journal of Epidemiology**, 39, i193–i205.

Carroll, M. (2002) Advanced nursing practice. **Nursing Standard**, 16(29): 33-35.

Child Care Act. (2005) Volume 492, Cape Town: **Government Gazette**. Pretoria: Government printers.

Charmaz, K. (2006) **Constructing grounded theory: A practical guide through qualitative analysis**. Thousand Oaks: SAGE.

Christiansen, L. & Alderman, H. (2001) Child Malnutrition in Ethiopia: Can Maternal Knowledge Augment The Role of Income? **The World Bank**. Available from: <http://www.worldbank.org.za> [Accessed January 7th, 2007].

Coffey, D. (2013) Does mother's status affect the child's stature, **Ideas for India**, 22 February 2013.



Collins, W. (2002) **Collins internet-linked dictionary of Social Work: Social Work defined and explained**. 2nd Edition. London: Harper-Collins Publishers.

Creswell, J.W. (2007) **Qualitative Inquiry and Research design: Choosing among five approaches**. 2nd Edition. Thousand Oaks California: SAGE Publications.

Creswell, J.W. (2013) **Qualitative inquiry and research methods: Choosing among the five approaches**. 3rd Edition, London: SAGE Publications, Inc.

Creswell, J.W. (2009) **Research design: Qualitative, quantitative, and mixed methods approaches**. London: SAGE Publications.

Crowther, P. (2008) **The association between household food security and mortality in children under 5 years of age in Agincourt, Limpopo Province**. University of the Witwatersrand. [Internet] Available from: <http://www.hdl.handle.net/123456789/5816> [Accessed October 11th, 2009].

De Lange, J.C. (2004) **Factors contributing to malnutrition I children 0-60 months admitted to hospital in the Northern Cape**. Bloemfontein: University of Free State.

Delpeuch, F., Traissac, P., Martin-Prével, Y., Massamba, J. P. & Maire, B. (2000). Economic crisis and malnutrition: socioeconomic determinants of anthropometric status of preschool children and their mothers in an African urban area. **Public health nutrition**, 3(01), 39-47.

De Onis, M, Frongillo, E.A. and Blossner, M. (2000) Is malnutrition declining? An analysis of changes in levels of child malnutrition since 1980. **Bulletin of the World Health Organization**. [Internet] Available from: <http://www.who.org.za> [Accessed January 7th, 2010].

De Vos, A., S., Strydom, H., Fouche, C.B. & Delpont, C.S.L. (2011) (4th Edition). **Research at grass roots: For the social science and human services profession**. Pretoria: Van Schaik Publishers.

De Vos, A.S., Strydom, H., Fouche, C.B. & Delport, C.S.L. (2005) **Research at grass roots: For the social sciences and human service professions**. 3rd Edition. Pretoria: Van Schaik Publishers.

D'Cruz, H. & Jones, M. (2006) **Social Work Research Ethical and Political Contexts**. Thousand Oaks: SAGE.

Ditebo, G.P. (2010) **Malnutrition in children: the perceptions of mothers in Botswana**. MSW dissertation, Pretoria: University of Pretoria, Pretoria [Accessed 10/03.2014].

Donalek, J.G & Soldwisch, S. (2004) Demystifying nursing research. An introduction to qualitative research methods. **Urology nursing**. volume 24. Number 4. p. 354 – 356.

Duggan, M. & Golden, B. (2005) **Deficiency diseases, in Human Nutrition**, 11th ed. Churchill Livingstone: Elsevier

El-Sayed, N., Mohamed, A.G., Nofal, L., Mahfouz, A. & Zeid, H.A. (2001). Malnutrition among Pre-school Children in Alexandria, Egypt. **Journal of Public Health Nutrition**, 19(4), 275-280.

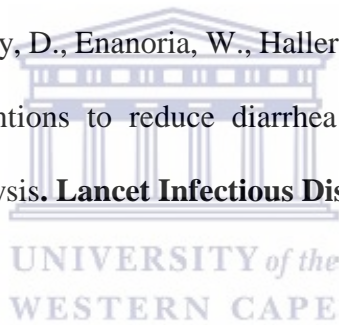
Engle, P.L., Menon, P. & Haddad, L. (2000). Care and Nutrition: Concepts and Measurements. **World Development**, 27(8), 1309-1337.

FAO. (2010). **Food-Based Approaches for Improving Diets and Raising Levels of Nutrition, Concept note.** International Symposium on Food and Nutrition Security: FAO, Rome, 7–9 December 2010.

Food and Agriculture Organizations of the United Nations (FAO). (1996) **Study on the impact of armed conflicts on the nutritional situation of children.** Available from: <http://www.fao.org.za> [Accessed January 7th, 2010].

Food and Agriculture Organizations: http://www.fao.org/organicag/ofs/index_en.htm [Accessed 31stMay 2015].

Fewtrell, L., Kaufmann, R.B., Kay, D., Enanoria, W., Haller, I. & Colford, J.M. (2005). Water, sanitation, and hygiene interventions to reduce diarrhea in less developed countries: A systematic review and meta-analysis. **Lancet Infectious Disease**, 5, 42-52.



Gill, K., Stewart, E., Treasure, E. & Chadwick, B. 2008. Methods of data collection in qualitative research: Interviews and focus groups. **British Dental Journal**, 204:291-295. London: Nature Publishing Group.

Golden, B. E., Corbet, M., Mc Burney, R. & Golden, M. H. (2000). Current issues in tropical pediatric infectious diseases, malnutrition: trials and triumphs. **Transactions of the Royal Society of Tropical Medicine and Hygiene**, 94, 12-23.

Government of Ethiopia. (2012) **The Ethiopia's National Nutrition Act.** Addis Ababa: Government Printers.

Grantham-McGregor, SM., 1984. **The social background of child malnutrition, In Malnutrition and Behavior: Critical Assessment of Key Issues.**in Brozek, J. & Schurch, B. pp. 358- 374. Lausanne, Switzerland: Nestle Foundation.

Graves, J.K. & Ware, M.E. (1990). Parents and health professionals' perceptions concerning parental stress during a child's hospitalization. **Children's Health Care**, 19(1):37 42.

Greeff, M. 2011. Information collection: interviewing. In De Vos A.S., Strydom, H., Fouché C.B. & Delport C.S.L. **Research at the grass roots for the social sciences and human service professions.** 4th Edition. Pretoria:Van Schaik Publishers.

Grinnell, R.M. & Unrau, Y.A. 2008. **Social work research and evaluation: foundations of evidence-based practice.** New York: Oxford University Press.

Gupta, P. 2012. **Phillipine: A community- based approach to reducing malnutrition among children.** Delhi: Delhi University.

Gyimah, S.O. (2007). What has faith got to do with it? Religion and child survival in Ghana. **Journal of Biosocial Science**, 39(6), 923–937.

Hailemariam, T.W. (2014). Prevalence of underweight and its determinant factors of under two children in a rural area of Western Ethiopia. **Food Science and Quality Management**, (31), 59-69. www.iiste.org. [Accessed 21stMay 2015].

Hall, K., Sambu, W., & Berry, L. (2014). *Early Childhood Development: A statistical brief*. Cape Town: Children's Institute, University of Cape Town and Ilifa Labantwana.

Hayes, A.F. (2012). **Process: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling**. [White paper]. Retrieved from <http://www.afhayes.com/public/process2012.pdf>

Health System Trust (2011) **Malnutrition causes economic loss**. (0) www.hst.org.za
[Accessed 19/04/2012].

Heimbürger, D.C. (2006) **Adulthood in, Modern Nutrition in Health and Disease**. 10th Edition. USA: Lippincott Williams and Wilkins.

Henning, E., Van Rensburg, A. & Smit, B. (2004) **Finding your way in qualitative research**. Pretoria: Van Schaik Publishers.

The logo of the University of the Western Cape, featuring a stylized classical building with columns and a pediment, with the text "UNIVERSITY of the WESTERN CAPE" below it.

Hennink, M., Hutter, I. & Bailey, A. (2011) **Qualitative Research Methods**. London: SAGE.

Hein, N.N., & Hoa, N.N. (2009) Nutritional status and determinants of malnutrition in children under three years of age in Nghean, Vietnam. **Pakistan Journal of Nutrition**, 8, 958- 964.

Hien, N.N., & Kam, S. Nutritional status and the characteristics related to malnutrition in children under five years of age in Nghean, Vietnam. **Journal of Preventative Medical Public Health**, 41(4), 232-240, 2008.

Hesse-Biber, S.N. & Leavy, P. (2010) **The practice of qualitative research**. Thousand Oaks: SAGE.

Ijarotimi, O.S. (2013) Determinants of childhood malnutrition and consequences in developing countries. Department of Food Science and Technology. **Current Nutrition Report**, 2: 129-133.

Jayachandran, S. & Pande, R. (2014) The youngest are hungriest, **Ideas for India**, 17 September 2014. CrossRefPubMedGoogle Scholar.[Accessed 21st December 2016].

Jonker, J. & Pennink, B.J.W. (2010) **Essence of research methodology: A concise guide for Master and PhD students in management science**. Heidelberg: Springer.

Kalanda, B.F., Verhoeff, F.H. & Brabin, B.J. (2006) Breast and complementary feeding practices in relation to morbidity and growth in Malawian infants. **European Journal of Clinical Nutrition**, Vol. 60, pp. 401 – 407.

Kasirye, I. (2010) **What are the successful strategies for reducing malnutrition among young children in East Africa?** Available: www.eprc.org.ug [Accessed 2012/07/13].

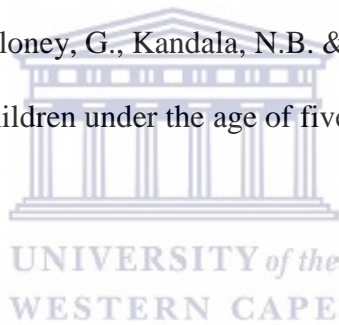
Katz, K.A., Mahlberg, M.H., Honig, P.J. & Yan, A.C. (2005) Rice nightmare: Kwashiorkor in 2 Philadelphia-area infants fed Rice Dream beverage. **Journal of the American Academy of Dermatology**, Vol. 52, pp. 69 – 72.

Kavosi, E., Rostami, Z.H., Kavosi, Z., Nasihatkon, A., Moghadami, M. & Heidari, M. (2014) Prevalence and determinants of under-nutrition among children under six: A cross-sectional survey in Fars province, Iran. **International Journal of Health Policy and Management**, 3(2), 71-76.

Kesmodel U., Olsen S.F., Secher, N.J. (2000) Does alcohol increase the risk of preterm delivery? **Epidemiology**, 11(5):512–518. [PubMed].

Kimani-Murage, E.W. (2013) **Exploring the paradox: Double burden of malnutrition in rural South Africa**. Kenia: APHRC Campus.

Kinyoki, D.K., Berkley, J.A., Moloney, G., Kandala, N.B. & Noor, A.M. (2015). Predictors of the risk of malnutrition among children under the age of five years in Somalia. **Public Health Nutrition**, 1-9.



Kothari, C.R. (2004) **Research Methodology: Methods and Techniques**. (Second Edition), New York: New Age International Publishers.

Kowaleski-Jones, L. (2006) "Malnutrition" in **Encyclopedia of world poverty**, Thousand Oak: SAGE. Accessed: 8 October 2014, from Credo Reference.

Klugman, J. (2002). **A sourcebook for poverty reduction strategies**. Washington: World Bank.

Kruger, R. & Gericke, G.J. (2003) A qualitative exploration of rural feeding and weaning practices, knowledge and attitudes on nutrition. **Public Health Nutrition**, 6:217–223. Google Scholar, Crossref, Medline, ISI. [Accessed 21st April 2014].

Lantana, C.F & Black, R.E. (2008) Nutrition and health in developing countries. Second Edition. **Diarrheal disease**. New York. Humana press. Pp 341 –369.

Larrea, C., & Kawachi, I. (2005) Does economic inequality affect child malnutrition? The case of Ecuador. **Social Science and Medicine**, 60, 165-178.

Le Roux IM, le Roux K, Comulada WS, Greco EM, Desmond KA, Mbewu N, Rotheram-Borus MJ (2010). Home visits by neighbourhood Mentor Mothers provide timely recovery from childhood malnutrition in South Africa: results from randomized controlled trial.

Nutrition Journal. Nov 22;9:56. doi: 10.1186/1475-2891-9-56. Available at: <https://www.ncbi.nlm.nih.gov/pubmed>

Lesotho Bureau of statistics. (2006) **Population and Housing Census**. Available at: www.bos.gov.ls/.../2006_Analytical_Report_Volume

Lesotho Bureau of statistics (2009) **Lesotho Demographic and Health Survey**. Available at: <https://dhsprogram.com/pubs/pdf/FR241/FR241.pdf>

Lincoln, Y.S. & Guba, E.G. (2000). Paradigmatic controversies, contradictions, and emerging confluences. In Denzin, N.K. & Lincoln, Y.S. (Eds.). **The handbook of qualitative research**. 2nd Edition. Thousand Oaks: SAGE.

Mahgoub, S.E.O., Nnyepi, M.S. & Bandeke, T. (2006) Factors affecting prevalence of malnutrition among children under three years of age in Botswana. **African Journal of Food Agriculture Nutrition and Development**, 6(1), 1-16.

Maree, K. (2007) **First steps in research**. Pretoria: Van Schaik.

Marini, A. & Gragnolati, M. (2003) **Malnutrition and poverty in Guatemala**. available at; <http://ideas.repec.org/p/wbk/wbrwps/2967.html> [Accessed 2nd May 2014].

Masiye, F., Chama, C., Chita B. & Jonsson, D. (2010) Determinants of child nutritional status in Zambia: An analysis of a national survey. **Zambia Social Science Journal**, 4(1), 29-42.

Mason, J.B., Bailes, A, Mason, K.E., Yambi, O., Jonsson, U., Hudspeth, C., Hailey, P., Kendle, A., Brunet, D. & Martel, P. (2005) AIDS, drought and child malnutrition in Southern Africa. **Public Health Nutrition**. Vol 8. nr. 6. pp. 551-563.

Maxwell, J.A. (2009) Designing a qualitative study in: Brickman, L. & Rog. D.J. (eds). **The Sage handbook of applied social research methods**. London: SAGE.

Maxwell, J.A. (2013) **Qualitative Research Design: An Interactive Approach**. 3rd Edition. Thousand Oaks: SAGE.

Marshall, C., & Rossman, G.B. (2010). **Designing qualitative research**. Thousand Oaks: SAGE.

Mboho, M. & Bassey, R. (2013). Mothers' variables as determinants of nutritional status of children 0-5 years in Nsit Ibom local government area of Akwa Ibom State, Nigeria. **Academic Research International**, 5(4), 187-198.

Morris, T. (2006) **Social work research methods: four alternative paradigms**. London: SAGE.

Mouton, J. (2001) **How to succeed in your master's and doctoral studies: A South African Guide and Resource Book**. Pretoria: Van Schaik.

Mizumoto, K., Takahashi, T., Kinoshita, Y., Higuchi, M., Bachroen, C. & Da Silva, V. (2015) A qualitative study of risk factors related to child malnutrition in Aileu district, Timor-Leste. Asia-Pacific, **Journal of Public Health**, 27(2).

National Department of Health, South Africa. (2003) **Guidelines for Nutrition Interventions at Health Facilities to Manage and Prevent Child Malnutrition**. Pretoria: Department of Health.

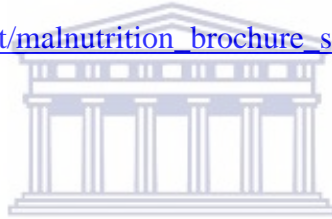
National Department of Health: Directorate Nutrition. (2005a) **The Integrated Nutrition Program Nutritional status**. Available from:

<http://www.doh.gov.za/programmes/inp/status.htm> [Accessed February 5th, 2007].

National Department of Health. (2005b) **Training modules for growth monitoring, counseling and promotion: The Road to Health**. Pretoria: Department of Health.

Nhampossa, T., Saguáque, B., Machevo, S., Macete, E., Alonso, P., Bassat, Q., Manéndez, C., & Fomadò, B. (2013) Severe malnutrition among the children under the age of five years admitted to a rural district hospital in southern Mozambique. **Public Health Nutrition**, 16(9), 1565-1574.

Niedzwiecki, A. & Rath, M. (2012) **Malnutrition: The Leading Cause of Immune Deficiency Diseases Worldwide. A case study of the Rath Research Institute**. Available at www.4.dr-rath-foundation.org/nat/malnutrition_brochure_screen.pdf [Accessed 12 July 2014].



Nzala, S.H, Siziya, S, Babaniyi, O, Songolo, P, Muula, A.S. & Rudatsikira, E. (2011) Demographic, cultural and environment factors associated with frequency and severity of malnutrition among Zambian children less than five years of age. **Journal of Public Health and Epidemiology** 3(8):362-370. From: <http://www.academicjournals.org> (Accessed 10 June 2014).

Patton, M.Q. (2001) **Qualitative Research and Evaluation Methods**. (2nd Edition). Thousand Oaks: SAGE.

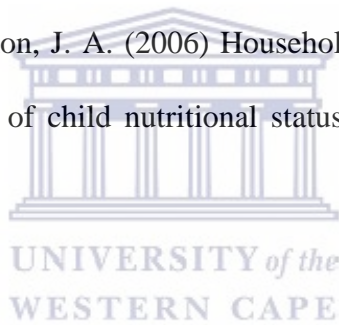
Patton, M.Q. (2002) **Qualitative research and evaluation methods**. 3rd Edition. London: SAGE.

Pelletier, D.L. (2002) **Towards a common understanding of malnutrition: Assessing the contribution of the UNICEF framework**. Geneva: World Bank/UNICEF.

Piercecchi-Marti, M.D., Louis-Borrione, C., Bartoli, C., Sanvoisin, A., Panuel, M., Pelissier-Alicot, A.L. & Leonetti, G. (2006) Malnutrition, a Rare Form of Child Abuse: Diagnostic Criteria. **Journal of Forensic Science**, Vol. 51, no. 3, pp. 670 – 673.

Play Therapy Africa. (2009) **Emotional stimulation in the context of emergency food interventions**. Addis Abada: Ethiopia Government.

Pongou, R., Ezzati, M. & Salomon, J. A. (2006) Household and community socioeconomic and environmental determinants of child nutritional status in Cameroon. **BioMed Central Public Health**, 98(6).



Rayhan, M.I., & Khan, M.S.H. (2006) Factors causing malnutrition among under five children in Bangladesh. **Pakistan Journal of Nutrition**, 6(5), 558-562.

Reddy, S. & Anitha, M. (2015) Culture and its Influence on Nutrition and Oral Health. **Biomed Pharmacology Journal**. 8/10 (October Special Edition).

Ritchie, J., Lewis, J., Nicholls, C. M. & Ormston, R. (Eds). (2013) **Qualitative research practice: A guide for social science student and researchers**. London: SAGE.

Rossmann, G.B. & Rallis, S.F. (2012) **Learning in the Field: An Introduction to Qualitative Research**. 3rd Edition. London: SAGE.

Rubin, A. & Babbie, E. (2005) **Research methods for social work**. 5th Edition. Sydney: Thomson Brooks/Cole.

Levine, R. & Kuczynski, D. (2009) Global Nutrition Institutions: Is There an Appetite for Change? **Working Papers Social t**. Available at; <https://www.cgdev.org/.../global-nutrition-institutions-there-appetite-change>. (Accessed 10 June 2014).

Saloojee, H., De Maayer, T., Garrenn, M.L. & Kahn, K. (2007) What's new? Investigating risk factors for severe childhood malnutrition in a high HIV prevalence South Africa setting **Scandinavian Journal of Public Health**, Vol.35. Issue S69. pp.96-106.

Semba, R. & Bloem, M.W. (2008) **Nutrition and health in developing countries**. Second Edition. Chapter 12: Malnutrition. New York. Humana press. pp341 – 369 2008.

Senol V, Ünalın D, Çetinkaya F, & Öztürk, Y. Traditional practices about public nursing in the city of Kayseri. *Clin Develop* 2004; 17: 47-55

Scrimshaw, N. S. & Viteri, F. E. (2010) INCAP studies of kwashiorkor and marasmus. **Food and Nutrition Bulletin**, 31(1):34-41.

Shafqati, N., Manzoor, S. & Abbasi, S. (2013) Relationship of sociodemographic factors with malnutrition in preschool children: A community-based study. **Pakistan Journal of Medical Research**, 52(4), 120-125.

Shank, G. D. (2006) **Qualitative research: A personal skill approach**. 2nd Edition. New York: Pearson.

Shargi, A., Kamran, A. & Faridan, M. (2011) Evaluating risk factors for protein- energy malnutrition in children under the age of six years. **International Journal of General Medicine**, 4, pp. 607-611.

Shashidhar, H.R. & Grigsby, D.G. (2009) **Malnutrition**. Accessed 30 March 2015, from <http://emedicine.medscape.com/article/985140-overview#aw2aab6b2b2>

Siddiqi, N. A., Haque, N. & Goni, A. (2011) Malnutrition of under-five children: Evidence from Bangladesh. **Asian Journal of Medical Sciences**, (2), 113-119.

Smith, L. C. & Haddad, L. (2000). Explaining child malnutrition in developing countries: A cross-country analysis. **International Food Policy Research Institute: Food consumption and nutrition division**. FCND. Paper NO. 60. Washington. DC USA

Smith, L.C., Ruel, M.T. & Ndiaye, A. (2005) Why is child malnutrition lower in urban than rural areas? Evidence from 36 developing countries. **World Development**, 33:1285-1305. Elsevier Ltd. Britain

Spoelstra, M. N., Mari, A., Mendel, M., Senga, E., van Rheenen, P., van Dijk, T. H., Bandsma, R. H. J (2012). Kwashiorkor and marasmus are both associated with impaired glucose clearance related to pancreatic β -cell dysfunction. **Metabolism**. [Medline].

Spohr, H.L., Willms, J. & Steinhausen, J.C. (1993) Prenatal alcohol exposure and long-term developmental consequences. **Lancet**. 341:907-910.

Stage, F. K. & Manning, K. (2003) **Research in the college context: Approaches and methods**. New York: Brunner-Routledge.

Steyn, K. (2008) **The situation begs the question**. Pretoria: University of Pretoria

Struwig, F. W. & Stead, G. B. (2001) **Planning, designing and reporting research**. Cape Town: Pearson Education.

Swart, R., Sanders, D. & McLachlan, M. (2008) Nutrition: A primary health care perspective. In: P. Barron and L. Roma-Reardon. **South African Health Review**. Durban: Health Systems Trust.



Teijlingen, E. & Hundley, V. (2001) **The importance of pilot studies**. **Social Research**.

Retrieved December 24, 2013, from <http://www.soc.surrey.ac.uk/sru/SRU35.html>.

Terre Blanche, M. & Durrheim, K. (2002) **Research in practice: applied methods for the social sciences**. Cape Town: University of Cape Town Press.

Terre Blanche, M., Durrheim, K. & Painter, D. (2006) **Research in practice: Applied methods for the social science**. Cape Town: University of Cape Town Press.

Torún, B. 7 Chew, F. (1994) Protein-Energy Malnutrition in, Modern Nutrition in health and disease. 8th ed. Vol. 2. pp. 950 – 975. United States of America: Lea and Febiger.

Torún, B. 2006. Protein-Energy Malnutrition in, Modern Nutrition in health and disease. 10th ed. pp. 881-906. United States of America: Lippincott Williams & Wilkins.

UNAIDS (2007). Monitoring the Declaration of Commitment on HIV/AIDS: guidelines on construction of core indicators, 2008 reporting. Geneva, UNAIDS.

UNICEF (1990). Strategy for Improved Nutrition of Children and Women in Developing Countries: A UNICEF Policy Review. New York: UNICEF: 5-36.

UNICEF. (1998). The state of the world's children. Focus on Nutrition. Oxford University Press, Oxford.



UNICEF. (2006). Tracking the progress of child malnutrition. Available <http://www.unicef.org/progressforchildren/2006n4/malnutritiondefinition.html>.

[Accessed 17 June 2014].

UNICEF. (2005). Psychosocial care and support of HIV positive babies and young children on ART in South Africa. Report on expert's meeting with National Department of Education and the National Department of Social Development [Internet] Available from <http://www.hsrc.ac.za> [Accessed October 11th, 2009].

UNICEF, (2004) Factors contributing to malnutrition in children 0-60 months. Available. www.edt.novs.ac.za (Accessed on 13/09/2014).

UNICEF. (2008). <http://www.unicef.org/infobycountry/sierraleone.html> [Accessed 5th May 2015].

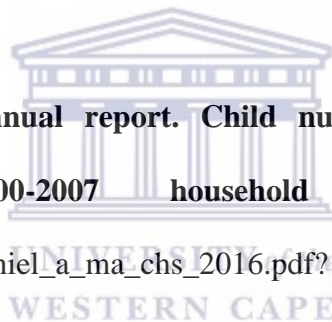
UNICEF. (2009) **Tracking Progress on child and maternal nutrition: A survival and development priority.** http://www.unicef.org/publications/index_51656.html

[Accessed 30 June 2015].

UNICEF (2009b) **A matter of magnitude: the impact of the economic crisis on women and children in South Asia.** Available from: <http://www.unicef.org.zam>

[Accessed January 7th, 2010].

UNICEF (2011) **Botswana annual report. Child nutrition situation in Botswana: Observations from 2000-2007 household survey.** Available at; etd.uwc.ac.za/xmlui/bitstream/Piniel_a_ma_chs_2016.pdf? [Accessed February 10th, 2017].



UNICEF (2013) **State of the World's Children report.** Available at; <https://www.unicef.org/sowc>

UNICEF (2013) **Lesotho Situation Report.** Available at; https://www.unicef.org/.../UNICEF_Lesotho_MidYear_SitRep_JanJul2013.pdf

UNICEF. (2009). **Tracking Progress on Child and Maternal Nutrition**. Available at; https://www.unicef.org/.../Tracking_Progress_on_Child_and_Maternal_Nutrition_EN_11030_9.pdf

United Nations (2013) United Nations Population Division of the Economic and Social Council estimates. Available at; www.un.org/en/development/desa/population/.../index.shtml

United States of America. (2011) **The American Heritage Dictionary of English language**. 5th Edition. United States: Government Printers.

Victora, C.G., Adair, L., Fall, C., Hallal, P.C., Martorell, R., Richter, L. & Sachdev, H.S. (2008) Maternal and child under nutrition: Consequences for adult health and human capital. **The Lancet**, 371(9609):340–357.



Walliman, N. (2006) **Social research methods**. London: SAGE.

Walraven, G. (2011) **Health and poverty**. London: Earthscan.

Wasserman, J. A. & Clair, J. M. (2010) **At home on the street: People, poverty, and a hidden culture of homelessness**. Boulder, Colo: Lynne Rienner Publishers.

Wengraf, T. (2001) **Qualitative research interviewing: Biographical narrative and semi-structured methods**. Thousand Oaks: SAGE.

Whitney, E. & Rady, S. (2005) **Understanding Nutrition**. 10th Edition. United States of America: Wadsworth/Thomson Learning.

WHO (2005) **Major causes of death worldwide among children under 5 years of age and neonates in the world, 2000–2003**.

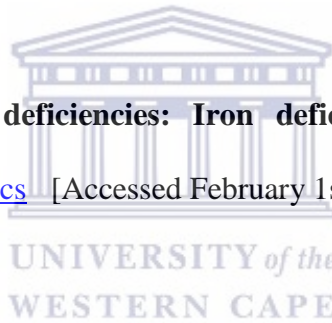
<http://libdoc.who.int/publications/2005/9241562986part4.pdf>. [Accessed March 3rd, 2017].

WHO. (2009) **Infant and young child feeding: Model chapter for textbooks for medical students] and allied health professionals**.

<http://www.who.int/nutrition/publications/infantfeeding/9789241597494/en/index.html>.

[Accessed January 20th, 2017].

WHO. (2010) **Micronutrient deficiencies: Iron deficiency anemia**. Available from <http://www.who.int/nutrition/topics> [Accessed February 1st, 2010].



WHO. (2011b) **Global database on child growth and malnutrition: estimates of global prevalence of childhood underweight in 1990 and 2015**. Available from: <http://www.who.int/metgrowhtdb/publication/underweight> (Accessed 17 May 2011).

Williams, A.F. (2005) Pediatric Nutrition in, The Nutrition Society Textbook Series, **Clinical Nutrition**. pp. 378 – 411. United Kingdom: Blackwell Publishing.

World Bank. (2011) Early childhood development. Available from <http://go.worldbank.org/BJA2BPVW91>) [Accessed 31/05/2014].

Zere, E. & McIntyre, D. (2003) Inequities in under-five child malnutrition in South Africa.

International Journal for Equity in Health, September, Vol. 2, n 7. Available from:

<http://www.equityhealthj.com> [Accessed February 5th, 2007]



APPENDIX A
ETHICS COMMITTEE OF QMMH

7 May 2015

Attention Me Busisiwe Polaki
Department of Social Work
Queen 'Mamohato Memorial Hospital

Dear Me. Polaki

Re: Application to conduct research at QMMH

We hereby acknowledge receipt of your application to conduct research at Queen 'Mamohato Memorial Hospital as part of the requirements for your Masters in Social Work.

Having reviewed the scope of the research proposal the hospital hereby grants approval for you to conduct your research at QMMH, subject to approval by the Ethics Committee based at the Ministry of Health.

We look forward to receiving approval from the Ministry of Health.

Yours sincerely



Dr. K.A. Prins
Operations Director



Hope for Quality Health Care

TSEPONG (PTY) LTD
Directors:
Dr. RH Friedland, Dr. N Moji, Dr. L Mosotho, T Green, Dr K. Prins, M Moteane
Reg. No. 2006/855

APPENDIX B

MINISTRY OF HEALTH RESEARCH AND ETHICS COMMITTEE



Ministry of Health
PO Box 514
Maseru 100

28th May 2015

Busisiwe Phillipine Polaki
Student Number 3479792
Masters in Social Work candidate
University of Western Cape

Dear Busisiwe,


**Re: Caregivers' perceptions on factors contributing to their children's
malnutrition (ID45-2015)**

Thank you for submitting the above mentioned proposals. The Ministry of Health, Research and Ethics Committee having reviewed the protocol hereby authorize ~~me~~ you to conduct the study among the specified populations. The study is authorized with the understanding that the protocol will be followed as stated. Departure from the stipulated protocol will constitute a breach of the permission.

We are looking forward to have final reports at the end of these studies.

Sincerely,


Dr. Piet McPherson
Director General Health Services (a.i)


Dr. M. M. Moteetee
Chairperson
National Health Research and
Ethics Committee (NH-REC)

APPENDIX C
INFORMATION SHEET

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-959, Fax: 27 21-959

Busisiwe Polaki (researcher) bmnpolaki@gmail.com

Dr. A. Beytell (supervisor) ambeytell@uwc.ac.za

INFORMATION SHEET

Project Title: Caregivers Perceptions on Factors Contributing to their Children' Malnutrition (Queen Mamohato Memorial Hospital, Maseru District, Lesotho)

What is this study about?

This is a research project being conducted by Busisiwe Polaki, a Masters student in Social Work at the University of the Western Cape. We are inviting carers to participate in this research project because they have experience and knowledge about various factors that contribute to their child' malnutrition in Health service areas in Maseru (urban) District, Lesotho. The purpose of this study is to explore and describe careers' perceptions on factors contributing to their children's' malnutrition and to provide recommendations for remedial action

What participants are asked to do if they agree to participate?

- Participants will be asked to take part in an interview which will last for approximately one hour. The interviews will be done privately in an office as arranged prior to the meeting. The interview will be approximately one hour. A tape recorder will be used with your permission. The questions which will be asked are:
- What do you think/perceive are factors that contributed to your child's malnutrition?

Would participation in this study be kept confidential?

All data will be confidential. Names will not be on the interview or on transcriptions of interview, which the research will use in order to get information for the research. A code will be placed on the collected data and the researcher will be able to link the study to the participants' identity with a code.

Codes will be used to identify data collected. No one else other than the researcher will have access to the data and the data which will be stored in a safe place, locked place. When writing a report or an article about this study, identity will be protected.

What are the risks of this research?

There may be an emotional risk. The interview may result in anger and feeling of frustrations. The participants may also have their hopes high that they are going to get something thereof. Referral to appropriate resources will be done to address these risks.

What are the benefits of this research?

The participant will not directly benefit from this study, but the outcome of the study will help improve understanding of others and provide recommendations regarding suitable remedial strategies to curb malnutrition since despite various interventions that were done to address the problem of malnutrition, the numbers are increasing in Lesotho as indicated by the statistics and the ministry of Social Development is over loaded with people who need food support due to having malnourished babies. Knowing exactly causes of malnutrition from the grassroots level will make it easy for the government to address them and reduce the dependency of carers on Social development and readmissions of malnourished children.

Do participants have to be in this research and may they stop participating at any time?

Participation in this research is completely voluntary. Participants may choose not to take part at all. If they decide to participate in this research, they may stop participating at any time. Participants will not be penalized.

Is any assistance available if participants are negatively affected by participating in this study?

If need arise that participants need assistance, they will be referred to the relevant person for help. Should they have any questions regarding this research and their rights as a research participant or if they wish to report any problems they have experienced related to the study, please contact the supervisor.

This research is being conducted by the Social Work Department at the University of the Western Cape. If there are any questions about the research study itself, please contact my supervisor Dr. A. Beytell at ambeytell@uwc.ac.za or telephone number (021) 959 22821 or (021) 959 2012. The address is: Social Work Department, University of the Western Cape, Private Bag X17, Belville 7535.

Should you have any questions regarding this study and the rights as a research participant or if any problems experienced related to the study need to be reported, please contact:

Prof. R. Schenck
Head of Department: Department of Social Work
University of the Western Cape
Private Bag X17
Belville 7535
Tel: (021) 959 2011
E-mail: rschenck@uwc.ac.za

Prof. J. Franz (Dean of the Faculty of Community and Health Sciences)
University of the Western Cape
Private Bag X17
Belville 7535

This research has been approved by the University of the Western Cape's Senate Research Committee and Ethics Committee.



**APPENDIX D
CONSENT FORM**



UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

**Tel: +27 21-959, Fax: 27 21-959
E-mail: bmnpolaki@gmail.com**

CONSENT FORM

Title of Research Project: *Caregivers Perceptions on Factors Contributing to their Children Malnutrition*

The study has been described to me in language that I understand. My questions about the study have been answered. I understand what my participation will involve and I agree to participate of my own choice and free will. I understand that my identity will not be disclosed to anyone. I understand that I may withdraw from the study at any time without giving a reason and without fear of negative consequences or loss of benefits.

Participant's name.....

Participant's signature.....

Date.....

Should you have any questions regarding this study or wish to report any problems you have experienced related to the study, please contact the study coordinator:

Dr A. Beytell (Supervisor)

Social Work Department

University of the Western Cape

Private Bag x17

Bellville

7535.

Telephone: (021) 959 2821

Cell: 0827761717

Email: ambeytell@uwc.ac.za

APPENDIX E:

VERIFICATION PROFESSIONAL EDITOR



INTERNAL MEMORANDUM

Private Bag X 5008, Kimberley, 8300
North Campus, Chapel Street, Kimberley
Tel: 053 491 0000
Fax: 086 604 6711
Website: www.spu.ac.za

TO: Who it may Concern

FROM: Dr Crispen Chinguno

DATE: 12 November 2018

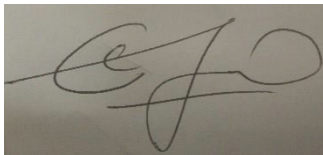
Ref: Proof of Editing



I Dr Crispen Chinguno, hereby confirm that I am an English language editor and on the 12th of November 2018, I edited a Master's thesis titled: *Caregivers Perceptions of factors contributing to their Children's Malnutrition* written by Busisiwe Polaki.

Should there be any further information required, please let me know.

Yours Sincerely



Crispen Chinguno (PhD)

Senior Lecturer

18-59

60+

PART II: Questions

Tell me what you think are the things that contribute to your child's being sick Include the following:

Understanding of child's condition

Explore:

What made you bring your child to the hospital?

What was explained to you about your child's condition?

What do you think is the cause of your child's illness?

How did you feel about the child's condition?

What did you tell other family members/people about the child?

Tell me what you know about malnutrition?

Tell me what you think is the cause of your child being malnourished

Expectations

What will you do to ensure that your child remains healthy in future?

How would you like the staff at the hospital to help you?

What sort of help would you like from other organizations or government departments?

What do you feed your children?

Where do you get food?

What about growing your own food?

If you get food from someone tell me what you do with it?

Experiences

What are some of the challenges you have experienced in caring for this child? (physically, psychologically, socially)

What sort of help is available to you?

Tell me about your health.

Tell me about the things that upset you when your child is sick?

Do you get support when your child is sick?

Do you stay with your children?

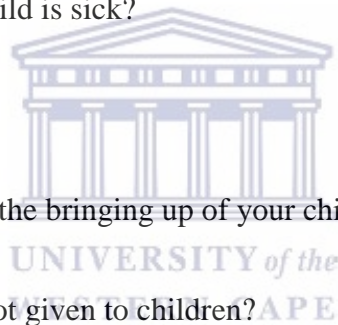
How does your culture influence the bringing up of your children?

Are there certain foods that are not given to children?

Tell me what you think could be the right practise.

Tell me where you stay. How does the environment look? Is there water, sanitation? Is it easy for you to get people to assist you with the health of your child?

Can you access the health care services?



APPENDIX G: TRANSCRIPT OF AN INTERVIEW

Transcript 1: Participant 1

Speaker	Dialogue	Code
1	Good morning, how are you?	
2	I am well, thank you.	
3	Thank you very much for agreeing to be part of this interview,	
4	I appreciate your willingness to participate. Just feel	
5	comfortable to share your honest and open thoughts with me.	
6	What is said in this room stays here.	
7	So tell me, what brings you here today?	
8	The baby is not well at all	
9	Oh! How do you call your baby's problem?	
10	The doctor said the baby had an infection and therefore she	
11	was admitting her so that she could put the baby on treatment.	
12	Did she say what caused it?	
13	She was mostly concerned on how and what the baby was	
14	eating. So I can't really say she told me. She only mentioned	
15	that the infection caused the vomiting that took too long	
16	leading to the baby' dehydration.	
17	Did she say what the way forward was?	
18	Yes, she said she had to admit the baby and I would be told	
19	further steps during the admission period.	
20	What were the first signs of the baby' problem?	
21	I was told that the baby was looking sick with mouth rash,	
22	skinny and looking tired most of the time. She later started	
23	having diarrhea. When I arrived, it was now two weeks and I	
24	took her to the nearest clinic where I was told that she was	
25	very weak. We were then referred to the hospital for further	
26	management.	
27	You said you were told, are you not staying with her?	
28	No, I left her sometime in July to look for a job, but I called	
29	every week and would be told that the baby was fine. I	

30	couldn't understand how was that possible because I made	
31	sure that the flour for soft porridge was there and I knew that	
32	grandmother would not make a mistake, she told me that	
33	babies were given soft porridge while adults were given all	
34	this hard food since they had teeth. And that it made fat	
35	babies. I was sending them money every month despite that it	
36	was small. So she should be fat, not this thin! (looking down	
37	at the baby angrily)	
38	Where were you working?	
39	I was a domestic worker in South Africa and they are paying	
40	much better as compared to here.	
41	Ok, who did you leave the baby with?	
42	I left her with my grandmother since I was living with her at	
43	that moment. I went to live with my grandmother, my	
44	mother's sister, after being expelled from home by my father	
45	when he discovered that I was pregnant. She welcomed me	
46	even though she feared my father that he was going to be	
47	angry with her for taking me in. I was also worried that I was	
48	causing trouble but I had nowhere else to go. The other thing	
49	was that my grandmother was not working and I was bringing	
50	another mouth to feed, (becoming emotional)!	
51	How many were you in the house now?	
52	She was living with four boys below 17 being sons of her late	
53	daughter, then me 22 and my grandfather who was above 70.	
54	I stayed with them until the baby was born.	
55	Did you attend the antenatal care?	
56	At what age did you leave the baby?	
57	At 3 months	
58	Hah! Why did you leave her at such young age?	
59	U won't understand, It's a sad story that I don't like	
60	remembering because it brings back painful memories that I	
61	want to burry and burry for good. Anyway I am a single	
62	mother because I am not married. I was still a student when I	

63	got pregnant and I noticed at 3 months. I ended up single	
64	because my boyfriend disappeared after I told him that I was	
65	pregnant,(tears filled her eyes)	
66	Hmmm!	
67	You know what I mean? I am telling you he was nowhere to	
68	be seen just like that. As for my parents, (taking a deep breath)	
69	I don't even want to say! I had never seen my father so	
70	disappointed and angry! My father told me to pack-up my	
71	clothes and leave his house. It was like I was dreaming at that	
72	time and I was going to wake-up.	
73	Hmmm! I could imagine!	
74	(Tears filled her eyes, paused) unfortunately he meant every	
75	word and I had no choice but to leave. So you can understand	
76	that I had to do something to help grandma.	
77	How old is she now?	
78	She is nine months now(the baby started crying at this point)	
79	May be she is hungry?	
80	You don't know how troublesome this baby is, she just keeps	
81	crying for no reason and I am really tired of this behavior. I	
82	wonder how my poor grandma was coping all this time.(she	
83	was shouting at the baby with anger that now she has to be	
84	admitted and therefore she was going to lose her job from	
85	absence. She couldn't help it, she was not happy at all.)	
86	Hmmm!	
87	Is it her first admission?	
88	Apparently this is the second but grandma just told me now.	
89	She said she didn't want to get me worried over nothing.	
90	What was the reason for the first admission?	
91	The same thing, diarrhea and vomiting	
92	What had grandma been feeding her?	
93	In my presence I breastfed her for those three months. She	
94	started on formula when I left. She was also given soft	
95	porridge, grandma believes in it. She also had a small	

96	vegetable garden and grandpa's old age pension to assist her	
97	in feeding the baby. And of course I sent money.	
98	Ok...	
99	We didn't have enough food, grandpa was always shouting	
100	that we are taking all his money not leaving him with	
101	something to drink and smoke. We were many, or perhaps it	
102	was enough before I came in with another mouth to feed. We	
103	sometimes went to bed on empty stomach because there	
104	would be no food. Hence I had to look for a job.	
105	Oh! I see...how did you feel?	
106	I was always crying because I knew there was plenty of food	
107	in my father's house. I also missed and wish my boy friend	
108	was there to support me. I felt so alone and unwanted. It was	
109	not an easy pregnancy at all.	
110	Oh I am sorry to hear that!	
111	It's okay	
112	Do you know how many times per day was she feeding the	
113	baby?	
114	I don't know, but I suspect that every time she cried she was	
115	given a bottle of soft porridge for as long as it lasted when	
116	they were not at home, but when she was at home I think	
117	almost every hour.	
118	Before you left, how many times a day did you feed her?	
119	Only when she was crying, so it would depend on how many	
120	times she cried that day.	
121	Were you oriented on how to feed the baby?	
122	Yes, I was told to breastfeed exclusively for six months but	
123	could give formula in cases where I couldn't breastfeed.	
124	Were you showed how to prepare the formula?	
125	No, but I think grandma knew how to prepare it	
126	How does your child being sick makes you feel?	
127	It is so painful, going home excited thinking that I was going	
128	to spend some quality time with my baby after working so	

129	hard only to find that I had to spend that time in a hospital!	
130	(Paused) but I am not angry with my grandma, she did her	
131	best. I think this baby was already not healthy from birth;	
132	maybe grandma just worsened it a bit.	
133	Why?	
134	While I was pregnant, we had several episodes where we	
135	didn't have food in the house. I think it also contributed to the	
136	unhealthy condition of the baby. Grandpa was complaining	
137	about food that I ate too much. The whole thing was	
138	disturbing me. I would go at the back of the house and cry.	
139	And you know what was even worse? When there was little	
140	protein, it was for my grandpa. We would be given pap and	
141	vegetables from the garden only and you know when you're	
142	pregnant you want this and that, nice food! In my home it was	
143	not like that, when the food was not enough for everybody, it	
144	would be given to children. I guess every house has its own	
145	culture. I was totally in a new world that was frustrating me.	
146	Felt so alone and unwanted, rejected by my boyfriend, parents	
147	and now my grandpa? It was too much for me,(crying)	
148	Hmmm!	
149	I felt so unlucky, I even thought it was a punishment	
150	somehow, imagine! I was emotionally alone during my	
151	pregnancy and it was not easy at all, yet here I am again had	
152	to stay in hospital? I was also concerned about the hospital	
153	bill since grandma was not going to be able to pay it. Can it	
154	also be because I didn't attend the antenatal care?	
155	Why didn't you?	
156	I didn't know about it, only learned of it after giving birth. I	
157	am not sure if grandma knew. She gave me traditional	
158	medication that she said was good for pregnant woman; I	
159	don't even know what it is.	
160	Hmmm...!	
161	Didn't she hesitate to look after the baby?	

162	No, she was ok with it because I was talking of more money	
163	and grandpa supported the idea. The baby was not going to be	
164	a problem because she said she would carry her everywhere	
165	she was going.	
166	Grandmother drinks a lot; she would put the baby on her back	
167	and take a bottle of soft porridge then go for her drinking the	
168	whole day.	
169	Hmmm...!	
170	Do you have access to clean water and sanitation?	
171	Yes, we have a community tap that always have water and	
172	there is a clean toilet, both at my grandma's place and my	
173	parents.	
174	In your own view, what do you think caused your baby's	
175	problem?	
176	Hmmm...! I admit it might be that she was not getting enough	
177	food according to the education that I was given but I am also	
178	confused because grandma said the baby was bewitched.	
179	Hmmm...! Why do you think it started when it did?	
180	Grandma went everywhere with her, you know people use	
181	strong muti (traditional charms) and babies get sick if they	
182	pass near those people. (She looked serious). Diarrhea is one	
183	of the signs when a baby is bewitched. I think we should have	
184	taken this baby to a traditional healer as well.	
185	Was it why grandma didn't take the baby to the clinic?	
186	I think so even though they also didn't have money to go to	
187	the clinic. And she didn't think it was that serious until when	
188	I arrived.	
189	What does your baby's sickness do to you?	
190	I am not happy at all, I have enough stress already and I just	
191	wish this baby could be as normal as other babies. Now I am	
192	going to lose my job.	
193	How severe is the sickness in your view?	
194		

195	She is very sick and I agree with the doctor on admission even	
196	though it would have been better if we consulted the	
197	traditional doctor first so that the baby could have both	
198	treatments.	
199	How long do you think is going to take for the baby to	
200	recover?	
201	A day or two will do	
202	What are you going to do when discharged to prevent this	
203	from occurring again?	
204	I will take the baby to a traditional doctor as well. I think I	
205	should stay with grandma for some time while the baby is	
206	under treatment and when she gets better I will go home to	
207	my parents and see if they are still angry. And if they are not,	
208	I will not go back to work but rather take care of the baby now	
209	that there will be no need for me to work.	
210	How was your baby before you left?	
211	She was ok, well-nourished without any signs of her getting	
212	infection but I was told that she had a low birth weight that I	
213	think is also keeping her from gaining weight.	
214	What do you fear most about this illness?	
215	I am afraid that my baby is not going to be the same again.	
216	It's not going to be easy to gain weight and be like other	
217	children. No one will want to play with her. You know how	
218	people look at a thin baby? No one likes a thin baby.	
219	What do you think can help you in this case?	
220	Going back to my parents, they raised me so well and I believe	
221	they can help me in raising my baby if they are no longer	
222	angry with me.	
223	What challenges do you face in your role as a care giver?	
224	Taking care of a child while you're still a child is not easy,	
225	it's so stressful, I know nothing about babies and how to take	
226	care of them. Mostly when grandma says the opposite of the	
227	nurses.	

228	Now it's towards the end of our discussion, is there anything	
229	that you would like me to know?	
230	I have realized that taking care of a baby it's not a child's play,	
231	I think if we were together with the father of this baby it would	
232	have not been so difficult, it takes two parents to care for a	
233	child like my parents did with me.	
234	Why do you think so?	
235	You know having his support would have been enough and	
236	his parents would have been supportive I guess when mine	
237	couldn't. And I would have left my baby for work.	
238	But you had grandma?	
239	Yes and she was supportive but it is not the same! Grandpa	
240	was stressing her because of me. So I also felt bad sometimes	
241	to see her miserable because of my presence. And she was	
242	struggling to get food.	
243	Ok, how are you going to get back home on discharge? Do	
244	you stay nearby?	
245	No, I am from Thaba-Tseka (a far district)	
246	Oh! How did you get here?	
247	I was brought by the clinic ambulance and hopefully I will go	
248	back with it. What I am not sure with is whether I am going	
249	to have to pay it or it was for free since it is for the	
250	government.	
251	Ok, thank you very much for your time, wish your daughter	
252	speedy recovery.	
	Thank you.	

Key: Participant was very emotional during the interview.

- **Participant 1:** mother of the patient- Blue
- **Researcher:** Black

APPENDIX H
TRANSCRIPT OF A FOCUS GROUP

Focus group A:

Speaker	Dialogue	Code
1	Thanks for agreeing to be part of the focus group. We appreciate your	
2	willingness to participate. I will be facilitating this meeting.	
3	The reason we are having this focus group is to find out your	
4	perceptions on your children's conditions.	
5	I need your input and want you to share your honest and open thoughts.	
6	I want you to do the talking and I would like everyone to participate. I	
7	may call on you if I haven't heard from you in a while. There are no	
8	right or wrong answers and Every person's experiences and opinions	
9	are important. Speak up whether you agree or disagree. I want to hear	
10	a wide range of opinions. What is said in this room stays here. People	
11	should feel comfortable sharing when sensitive issues come up. I want	
12	to capture everything you have to say therefore I will be tape recording	
13	the group but We don't identify anyone by name in our report. You will	
14	remain anonymous.	
15	1. Can each of you tell us why you are here today?	
16	Participant 1. I brought my baby to the hospital because he had severe	
17	diarrhoea that was not stopping. It had taken three weeks before I could	
18	bring him.	
19	<i>(Puzzled facial expression) three weeks?</i>	
20	Yes! I was hoping it would stop. I tried some home remedies in the	
21	mean time thinking that it was just normal diarrhoea in babies.	
22	Participant 2. It is true, that is where we all start, when a baby has	
23	diarrhoea, the first thing we do is to try home remedies or even consult	
24	a traditional healer. They also know how to stop diarrhoea in babies	
25	more than Morden doctors.	
26	<i>Oh! (Looking surprised), please tell me more?</i>	
27		

<p>28</p> <p>29</p> <p>30</p> <p>31</p> <p>32</p> <p>33</p> <p>34</p> <p>35</p> <p>36</p> <p>37</p> <p>38</p> <p>39</p> <p>40</p> <p>41</p> <p>42</p> <p>43</p> <p>44</p> <p>45</p> <p>46</p> <p>47</p> <p>48</p> <p>49</p> <p>50</p> <p>51</p> <p>52</p> <p>53</p> <p>54</p> <p>55</p> <p>56</p> <p>57</p> <p>58</p> <p>59</p> <p>60</p>	<p>I also came here because my baby had diarrhoea and the colour of the stool was black. In most cases when the diarrhoea is black or green it's because the baby had been exposed to a strong Muti. So the first thing that I did was to rush to a traditional doctor who gave me some herbs to use for three days.</p> <p><i>Hmmm!</i></p> <p>And at that time the baby had three days of the episode, meaning that it was going to be six days if it was not going to stop. I did use the herbs as told for three days but unfortunately it didn't stop but rather the black colour changed to a normal yellowish colour.</p> <p>Participant 3. And that was still helpful because it meant that the baby was out of danger. He was left with normal diarrhoea. If you came straight here he wouldn't have made it. Modern doctors can't help babies that were exposed to strong Muti. When the baby is out of danger you can now take him/her to the clinic.</p> <p><i>Oh! I see...! Anyone else with the same problem of diarrhoea?</i></p> <p>Participant 4. My baby also had diarrhoea even though it was coupled with vomiting. She started by losing weight too much before she could have episodes of diarrhoea. As I was still watching where the diarrhoea was leading, hoping that she would get better, she started vomiting. This scared me and made me realise that there was something seriously wrong with the baby and decided to bring her to the hospital. Unfortunately we got admitted.</p> <p><i>Did you also try some home remedies before?</i></p> <p>No, unfortunately I didn't know of any, my mother passed while I was pregnant and I am just staying with my husband, no adults close.</p> <p><i>I am sorry about your mum!</i></p> <p>It is okay.</p> <p>Participant 3. For my baby it was not diarrhoea but she developed it here after three days of admission. She is not a big baby from birth since she was a preterm baby. Everything was going on well until she started to lose appetite. I tried many tricks to help her but I failed. Mark that she was "not sick". After a month of this new behaviour, we noticed</p>	
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<p>61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93</p>	<p>that she was gaining weight. This surprised me a lot because it was strange. How could someone who was not eating well gain weight. After a week of this weight gaining, we noticed that actually this baby was swollen and it was terrible. Immediately I took her to the hospital and we were admitted on arrival. She was put on medication but after three days she started to have diarrhoea.</p> <p><i>Ah! What caused it now?</i></p> <p>The doctor said it was the side effects of the medication the baby was given but promised me that she was going to be okay. That is in short why I am here today.</p> <p><i>Thank you, anybody else? (Pointing at participant 5) you haven't said a word, please tell us why your here.</i></p> <p>Participant 5. My story is deferent so I thought it's only those with diarrhoea?</p> <p><i>Oh! no, please tell us your story, we also like to hear it</i></p> <p>In that case ok, but you won't believe. I took the baby to the clinic just because she had a common cold. She was coughing a lot. We didn't sleep at night because of her coughing. Hmmm! But on our arrival at the clinic the nurse was so shocked when she looked at my baby; I think you don't understand, it was as if she had seen a ghost.</p> <p><i>Hmmm! Please tell us more! (looking puzzled)</i></p> <p>She took the baby's vital signs so they said, wrote in the butane and called the ambulance driver to take us to the hospital. I tried to ask her what was going on, she just shouted at me and asked me if I wanted the baby to die. Imagine! How could I want my baby to die?</p> <p>Participant 8. Know ways, you wouldn't have taken her to the clinic if you wanted to kill her. That is why I don't like taking my children to the clinic when they are sick. These nurses talk to us like we are age mates and like we are not human beings. I can't stand to be disrespected by small girls there just because they think they went to school.</p> <p><i>Please cool down my dear, I understand where your anger is coming from. Participant 5, were you done?</i></p>	
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<p>94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126</p>	<p>No, I just wanted you to understand when I say I don't know why I am here. Because coughing cannot make a baby be admitted.</p> <p>Participant 6. No! Even when you got here no one explained to you what was going on?</p> <p>After attending to the baby, because she was attended to as soon as we arrived here which was yesterday, they all couldn't talk to me. It was only this morning when the doctor came to me to explain what was going on.</p> <p><i>And that was?</i></p> <p>Apparently the baby was severely wasted and dehydrated so he said. So I am still saying that I don't know why I am here because that is not why I went to the clinic.</p> <p>Participant 7. (laughed)</p> <p><i>Oh! I see where that comes from, it's okay, please don't laugh participant 7. How is the baby doing at the moment?</i></p> <p>I really can't say better or worse because I don't know what was wrong.</p> <p><i>It's okay. Can we move to the next one please?</i></p> <p>Participant 6. I brought my baby here because he had swollen hands and legs. I am not staying with him because I work in South Africa, so on my arrival as I came for the weekend I found that the baby was not doing well at all. I asked my mum if she was aware that the baby was swollen, she said yes but she didn't have money to take the baby to the clinic and she didn't want to worry me since it was only a few days left before I came.</p> <p><i>Go on?</i></p> <p>Yes, on our arrival at the clinic we were also told to go to the hospital since the ambulance had gone for repairs. Since I didn't take enough money, I had to go home and wait for tomorrow to go early in the morning hoping that we would come back. Unfortunately the baby was admitted. That is why I am here today.</p> <p><i>Ok, thank you very much. Have we all spoken?</i></p> <p>Participant 1. No, we still have two more left. Participant seven and eight.</p>	
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127	Participant 7. Yes, I am here because I was referred from the clinic
128	to this hospital because I was told that my baby lacked good nutrition
129	and therefore she was malnourished.
130	<i>And what is that?</i>
131	I don't know but from what I get it's a condition given to children that
132	are not properly fed.
134	<i>Oh! I see...! Were you no feeding the baby properly?</i>
135	No! (<i>Getting angry</i>)
136	<i>Why did you go to the clinic in the first place?</i>
137	The baby didn't seem to be growing but she was getting younger day
138	by day. Her skin was also not firm like any other skin; it was like that
139	of a wrinkled old lady.
140	<i>Hmmm! That must be terrifying?</i>
141	A lot, hence I decided to go to the clinic. I was hoping that the nurse
142	could be able to see what was wrong with my baby.
143	<i>Thank you participant 7, participant 8?</i>
144	Participant 8. As you can all see I am older than all of you, I know a
145	thing or two about babies so being instructed by these young nurses
146	here how to take care of my child doesn't sit well with me. But in
147	anyway this time I had no choice because it was now a month since my
148	baby had a common cold. I took her to the district hospital where after
149	checking her chest was transferred here. So I can say my baby is here
150	because she was diagnosed with pneumonia even though on our
151	admission here I was also told that the baby was not well nourished.
152	Participant 5. You see! This is the same as my case. This baby came
153	for the common cold, and now the doctors are ruling something else
154	and even admit the baby instead of giving medication.
155	Participant 1. But I think the explanation could be that because of the
156	common cold the babies lost appetite and were not eating well,
157	therefore their bodies lacked some nutrients. Or the coughing was not
158	allowing them to eat.
159	<i>Thank you very much, can we move to the next question?</i>
160	<i>(All of them nodded yes)ok,</i>

<p>161</p> <p>162</p> <p>163</p> <p>164</p> <p>165</p> <p>166</p> <p>167</p> <p>168</p> <p>169</p> <p>170</p> <p>171</p> <p>172</p> <p>173</p> <p>174</p> <p>175</p> <p>176</p> <p>177</p> <p>178</p> <p>179</p> <p>180</p> <p>181</p> <p>182</p> <p>183</p> <p>184</p> <p>185</p> <p>186</p> <p>187</p> <p>188</p> <p>189</p> <p>190</p> <p>191</p> <p>192</p> <p>193</p>	<p>2. What do you think and were told was the cause of the illness?</p> <p>Participant 5. I think my baby had a common cold because the weather was very cold in the past weeks. You know how it is at these months in the highlands. For being severely dehydrated and wasted I don't want to lie, I don't know the cause. I was told that she was not fed nor given fluids. I don't want to agree to that because there is no way she couldn't be fed. It is true that I am not working and in some days we go without food, but when there is food I do give her. There is no where I could steal when there is nothing.</p> <p><i>Ok, cool down, we understand.</i></p> <p>Participant 8. I was asked if I was exposed to cold staff during my pregnancy since it could be the cause of pneumonia. And I was also told that since the baby was not severely malnourished, it might have been due to the illness that the baby didn't eat well. I fully agree with him because the baby was fine before the coughing.</p> <p><i>Thank you, somebody else?</i></p> <p>Participant 1. I was told that he lost too many fluids and he was very weak. I was questioned on how I feed him because the doctor said his body lacked nutrients, not because he had severe diarrhoea but he was already weak before the diarrhoea.</p> <p><i>And what do you say?</i></p> <p>I don't agree, my baby was well and healthy before this diarrhoea. He is well fed for sure.</p> <p><i>Please tell us how and what you feed him?</i></p> <p>Like any other child, I give him formula milk because I was told not to breast feed due to my health status. And I was told to give him milk only until he is six months. He is not yet even six months yet I am told that he is not well fed.</p> <p><i>Ok, I understand, how do you prepare his milk?</i></p> <p>Easy, I get a big tin from social development and it takes a month or more when I managed to save.</p> <p><i>(Puzzled) save! How?</i></p>	
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<p>227 228 229 230 263 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323</p>	<p>Yes she was, therefore you would understand that her body was still not strong enough to fight against all these infections. She can't big so big from always being sick.</p> <p>Participant 6. I was told the same thing as participant 3 that I don't feed the baby. I don't agree with this. My mother is very good at looking after children and there is enough food at my home. It is impossible that the baby is not fed.</p> <p><i>Ok, what is your view?</i></p> <p>It's just a sickness that I don't know what caused it but definitely not food.</p> <p><i>Ok.</i></p> <p>Participant 2.I was told that she had an infection that caused the diarrhoea. When trying to find out what caused that infection, I was told that her body was very weak, lacking many nutrients and that made her prone to infections.</p> <p><i>What's your view on that?</i></p> <p>I don't agree with the doctor but that is how he sees it. English doctors don't agree with the traditional way of doing things.</p> <p>Participant 8. She could have died if you didn't take her to the traditional doctor before bringing her here.</p> <p><i>Is it so?</i></p> <p>Yes! She was okay all along, I didn't see her weak. The problem started when my cousin was visiting us. She uses Muti too much. That is why I went straight to the healer. It was obvious that it was too strong for her.</p> <p>Participant 4. I was told that the baby had an infection that caused diarrhoea and vomiting. I was asked about hygiene at home and my source of water. The hygiene is very much compromised but I didn't know that could be harmful to my baby. There is no way I could have controlled it because we are too many in that house and you know how crazy it gets when you live with other people. I had not been boiling water like the doctor suggested when I told him that I get my water from the village spring.</p>	
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357	Participant 7. My baby was preterm, and I understand that she won't
358	be like normal babies born after nine months of pregnancy. So I agree
359	that she lacks some nutrients, hence she is malnourished, but it is not
360	my fault and it is not because she was not well fed.
361	<i>What do you feed her?</i>
362	She likes porridge very much. She could eat it the whole day she
363	would be fine. There is no stress because I make sure that there was
364	enough porridge.
365	Participant 8. Just porridge? (<i>Surprised</i>)?
366	Not really but most of the time yes. When I eat, I give her but I eat
367	only in the morning and before sleeping hence I said most of the time
368	it will be porridge.
369	<i>Hmmm!</i>
370	Participant 1. How old is she?
371	1 year six months
372	She is too old to be fed only twice. I think she was not getting enough
373	food for her body. Coming to my understanding about this
374	malnutrition, I got that every child who has diarrhoea has malnutrition
375	because all of these babies here complain of diarrhoea and they were
376	said to be malnourished.
377	<i>Thank you for your input participant 1</i>
378	Participant 8. I believe that it's an illness that can attack babies
379	whose mothers are working and have to leave them with other people
380	who definitely are not feeding them well. Even babies from teen
381	mothers because they don't have experience in caring for babies and
382	how to feed them.
383	Participant 2. From what I see, it is the diarrhoea because most of
384	these children who were said to have malnutrition had diarrhoea.
385	<i>Ok!</i>
386	Participant 6. I was told that it's a state the child becomes in when
387	nutrients are not enough in the body and as a result making the baby
388	sick. Meaning that my baby was swollen as a result of insufficient
389	nutrition. I won't agree but in Sesotho all babies become swollen at

390	some stage when they are weaned. I just don't understand why mine	
391	showed it so late because its four months now of not being breast fed.	
392	How old is she?	
393	She is two now but by the time I was weaning her she was one and six	
394	months hence I am surprised that she was only showing the side	
395	effects now.	
396	<i>Hmmm!</i>	
397	Participant 5. I think that I do understand now what this malnutrition	
398	is and why the nurses were so worried about the baby and angry with	
399	me. This is because I can see a difference between my baby and those	
400	other babies that were not said to be malnourished even though it is a	
401	very few numbers of them. The good thing is that the nurses assured	
402	me that by the time we are discharged she will be looking much	
403	better.	
405	<i>I'm glad to hear that!</i>	
406	5. When was the baby admitted and how do you feel?	
407	Participant 1. Two weeks back. I am not happy at all, my baby seems	
408	to be suffering, it's been five weeks now. I know the pain of those	
409	drips there. I feel for him.	
410	Participant 8. It's a week now, but she had been sick for a month	
411	before I brought her here. I am thinking of her small lungs .I blame	
412	myself for not bringing her sooner. As much as I want her to get well,	
413	my other children need me at home. I wonder if it's possible to be	
414	discharged and be given medication to use at home.	
415	Participant 5. My other children and husband at home needs me. I	
416	don't have money to pay the hospital bill even though I am happy to	
417	be here.	
418	<i>How could you be happy?</i>	
419	If you were me, you would also be happy.	
420	<i>Why?</i>	
421	There is plenty of hot water, food, and there are heaters keeping us	
422	ward. Someone comes to change our gowns, bed linen and does the	
423	bed. We absolutely do nothing.	

424	<i>Oh, I see!</i>	
425	Yes.	
426	Participant 4. I am happy that I taught all the staff that is going to	
427	help me to raise my baby better and be a better mum. It is true that I	
428	don't like staying in the hospital but for the benefit of my baby it's	
429	okay.	
430	<i>When were you admitted?</i>	
431	Oh! Its three weeks now and I am happy with the progress.	
432	Participant 2. It's a week now but she had been sick for two weeks	
433	because I brought her here after being sick for a week. I am not sure	
434	how I feel because the nurses are blaming my traditional healer for the	
435	herbs he gave the baby.	
436	That is not fair! They really shouldn't be saying that because even	
437	they, their parents consulted healers. We all do and you were trying	
438	what was best for your baby.	
439	I agree with you, traditional healers know babies more than anything,	
440	but its okay please don't mind them.	
441	I think they still know but they are just doing their work. It's their	
442	responsibility to tell us about the side's effects of using herbs and it	
443	will be our choice.	
444	But they shouldn't make her feel bad like she is the worse mother in	
445	the whole world.	
446	You see! That is what I mean. I don't think I will ever come here	
447	<i>Please calm down!</i>	
448	Participant 7. Yes please, let me say my side to allow you to cool	
449	down. It's a month now of admission, but you want to know truly	
450	how I feel?	
451	<i>Yes please!</i>	
452	I am more than happy. This is because I can see a huge difference in	
453	my baby every time she is admitted. She grows and gains weight. And	
454	life is good here.	
455	<i>How could life be good at the hospital? (Puzzled)</i>	
456	There is electricity, warm water and proper food.	

<p>457</p> <p>458</p> <p>459</p> <p>460</p> <p>461</p> <p>462</p> <p>463</p> <p>464</p> <p>465</p> <p>466</p> <p>467</p> <p>468</p> <p>469</p> <p>470</p> <p>471</p> <p>472</p> <p>473</p> <p>474</p> <p>475</p> <p>476</p> <p>477</p> <p>478</p> <p>479</p> <p>480</p> <p>481</p> <p>482</p> <p>483</p> <p>484</p> <p>485</p> <p>486</p> <p>487</p> <p>488</p> <p>489</p>	<p><i>Hmmm!(Others smiled)</i></p> <p>Participant 3. It's also two weeks and as for how I feel, I am confused and tired of admissions after another. I just want to get over with it and go home. On the other hand I don't understand what it is that I am doing wrong. They won't even tell you these nurses. I am sure you all remember my story, they couldn't tell me what was wrong with my baby and waited for us to reach this place, you see! I was not lying.</p> <p>Participant 6. It is a week now and it already feels like a month. <i>And why is that? (Looking surprised?)</i></p> <p>My job is at stake, my employer is going to hire someone and I am going to be jobless for how long, I don't know. I tried to ask the nurses if they could allow my mother to come and stay with my child by they refused, insisting that is was important that it was her biological mother. The problem is that if I lose my job I won't be able to feed her the way they recommend.</p> <p><i>Ok!</i></p> <p>6. How are you going to make sure that the child doesn't get malnutrition again?</p> <p>Participant 1. It's difficult to say but we will try by all means. We cannot control baby's illnesses.</p> <p>Participant 8. We try, like I said my baby was fine before the cough, I will still try. We have enough food to cope. It is just that there is nothing I can do to stop her from being sick. I will also try to keep her warm. You know what? My baby became malnourished because she lost appetite due to the common cold and started to refuse food. With the cough gone, she will be okay.</p> <p>Participant 5. I was assured that my baby will be more than well when we go home, the problem is that I am afraid she is going to go back. The way we are taught how to feed them, I really can't afford that kind of food. I am unemployed and we struggle a lot. I really can't say I will make sure she doesn't get sick again. Besides, I don't see it as a bad thing if we come again. I am enjoying staying here.</p>	
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490	<i>Where is your husband?</i>	
491	He is there but he is also unemployed. He heads our goats.	
492	<i>Parents?</i>	
493	My mother is still alive; she sometimes gives us a little after getting	
494	her pension grant.	
495	Participant 4. I will make sure to boil water before preparing the	
496	baby's food. I will also try to make a conducive environment for the	
497	baby even though it's going to be hectic.	
498	Participant 2. I will stop wasting time, when I see diarrhoea; I will	
499	make sure that I see a traditional doctor as soon as possible so that I	
500	don't wait more time to come to the hospital.	
501	Participant 7. I will try to feed her according to the instructions and	
502	see if there will be a difference.	
503	Participant 3. I don't know what to say because I trust my mother to	
504	take good care of her. With me being in South Africa I can't promise	
505	anything.	
506	Participant 6. I really don't know what to say.	
507	7. How many times had you been admitted with the baby and	
508	what was the reason?	
509	Participant 4. This was the first time	
510	Participant 2. And me	
511	Participant 7. I don't even remember but I know that we hardly take	
512	two months out and with the same reason.	
513	Participant 3. Two times for the same reason as now	
514	Participant 5. This was the third time even though two times were at	
515	the clinic because they said the baby was dehydrated.	
516	Participant 1. This was the first time	
517	Participant 6. And me	
518	Participant 8. And me	
519	8. How would you like to be assisted, either by the	
520	government or organizations?	
521	Participant 1. Vaccines that prevent diarrhoea	
522	<i>Anyone for this point</i>	

523	Participant 3. Yes, I agree. It is the main reason we are here today	
524	with sick babies and there is nothing we can do to stop it.	
525	<i>Ok, someone else?</i>	
526	Participant 8. Food packages	
527	<i>Anyone to build on that?</i>	
528	Participant 5. Yes, food packages every month, I am really	
529	struggling to have food. Or help us to start our projects that will take	
530	us for a longer period of time	
531	Participant 4. We should be educated more on health issues and the	
532	government should meet us half way in reducing poverty.	
533	Participant 2. Traditional doctors should work hand in hand with	
534	English doctors.	
535	Participant 7. The government should help us with free	
536	hospitalisation of pre term babies. They should stay here until their	
537	full term without paying the hospital bill because it's expensive.	
538	Participant 6. Jobs so that we don't have to go to south Africa	
539	searching for domestic work.	
540	Is there anything else any one would like to say?	
541	<i>(All nodded with heads that there was nothing)</i>	
542	<i>Thank you very much for you time and the information you shared</i>	
543	<i>with me.</i>	

APPENDIX I

OBSERVATION CHECK-LIST

Home visit form

Date of visit **30/01/16**

Participant nr **5**

Age **6 months** Sex **M**

Food security		
Is there food available in the house?	Yes*	no
There was enough food by the look of things even though the baby was only bottle fed. I was also offered something to eat. Looking around, there were two mat houses, one used as a bedroom and another as a kitchen. There were some groceries at one corner of the kitchen		
Is there a vegetable garden?	Yes	No*
Looking around there was nothing planted in the yard. Learned from the conversation that they had fields somewhere, where they planted food grains.		
What is the source of income for the family?	Salary (factory worker), old age pension	
The care giver told me that she had a daughter who was a mother to the baby she was taking care of and she worked as a factory worker. I also learned that the caregiver who was the grandmother to the baby was getting old age pension grant and it helped them a lot.		
caring		
Are both parents alive and in good physical shape	Only the mother	
The grandmother was too drunk and she was struggling to walk. The baby looked younger than six months.		
Who takes care of the sick child during the day?	grandmother	
The grandma's role was to look after the baby the whole day since the baby's mother left early and came late. And to provide food for other children as they arrived from school.		
Is the sick child well cared for in outward show?	Yes	No*
It was around 9:00 am and grandma was already drunk. She had some alcohol in a 2liter bottle that she said would take her till after lunch.		
Is the child looking happy and playful?	Yes	No*

He couldn't play and relax; She was given the bottle every time she cried. He also looked sick or unhappy since I tried to make him laugh but he couldn't. He was also crying too much. Grandma hardly gave him time.		
Is the baby given enough attention?	Yes	No*
He was always carried on the back or given the bottle to keep quiet. . I was also told that the baby's mother was not coming to terms with the fact that the baby's father had disappeared. She was not able to help grandma with the baby when she arrived from work. There was no bond between her and her son.		
feeding		
Is the food package there in the home?	Yes	No*
If not, where is the package?		
It was not given from the clinic since he was not yet introduced to solid foods		
Is the available package enough to last until the next refill period?	Yes*	no
The formula was still enough to last till pay day.		
Is the food package being shared or eaten only by the sick child?	Shared*	
Available food was shared between six people; she told me that they also lived with her daughters' kids that were at school, 2 boys and 2 girls, grandma and her daughter.		
Is the child given other foods in addition to the package?	Yes	No*
Only the formula		
If yes, what type of food?		
How many times a day does the child eat?	As often as possible	
Every minutes he cried		
Does someone help/encourage the sick child to eat?	Yes*	no
Grandma forced him the bottle even when he refused, just to stop him from crying.		
What happens if the child does not want to eat?	Grandmother became impatient and clap him	
Is the child presently breastfeeding?	yes	No*
He was bottle-fed since her mother had to go to work		
Is clean water accessible?	Yes*	No
There was a tap		
Health		
Is there a toilet?	Yes*	No

<p>The hygiene was much compromised; the baby's bottles and other dirty dishes were put in a bowl under the table. I was told that the clinic was too far and not easy to reach but there were community health workers that led me to this house. Their role was to take baby's weights every month and advise if the weight was not improving. They also gave them vaccines of which grandma didn't go accordingly making the baby susceptible to infections. The baby was also found to be very much underweight for his age but swollen hence classified as malnourished baby. Hygiene wise the environment was not conducive for the six month old baby. Grandma could not wash and rinse the baby's bottles, could not wash hands after using a toilet and before handling the baby's utensils.</p>	<p>There was a toilet and a tap in the yard.</p>	
<p>What is the family's main source of water?</p>	<p>tap</p>	
<p>There was a water tap in the yard</p>		
<p>Is there soap for washing and cleaning in the house?</p>	<p>Yes*</p>	<p>no</p>
<p>It looked like she tried to wash the dishes before she got high and there was soap next to them</p>		
<p>Do the caregiver and child wash hands before the child is fed?</p>	<p>yes</p>	<p>No*</p>
<p>Grandma was too high from the 2litre bottle that she was drinking from; she told me that it was the home made brew from the far end of the village. She was also taking some snuff from time to time. After taking it she got so high that she forgot I was there. She could not hold a baby to stop him from crying. Let alone washing hands.</p>		
<p>Is food covered and free from insects?</p>	<p>yes</p>	<p>No*</p>
<p>In my presence, She used cold water to prepare the baby's milk and when asking why she was using cold water she said it was easy for her because she didn't have to wait for the milk to cool down. The house was so dirty and she couldn't clean due to the high state she was in.</p>		
<p>What does the caregiver do when the child has diarrhoea?</p>	<p>He didn't have diarrhoea but he was swollen all over the hands and legs</p>	
<p>The formula was not well prepared and the compromised hygiene. It was written in the baby's health booklet.</p>	<p>They believed that the baby was crying because he wanted to sleep and it was ok and normal for a baby to cry itself to sleep. Hence they delayed taking him to the clinic</p>	