

EXPERIENCES OF CHILD HEALTH NURSES MANAGING MALNOURISHED CHILDREN IN THE GROWTH MONITORING AND PROMOTION SERVICE IN REGION D, GAUTENG PROVINCE

Henrietta Molelekeng Magalemele

A research report submitted to the Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, in partial fulfilment for the requirement for the degree of Master of Science in Nursing

Johannesburg, 2013

2013/10/30

DECLARATION

I, Henrietta Molelekeng Magalemele, declare that this report is my own work. It is being submitted for the degree of Master of Science (Nursing) at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree at any other university.

Signature: _____
Henrietta Molelekeng Magalemele

Date: _____

DEDICATION

This research report is dedicated with humble sincerity to our heavenly Father, by whose love, grace and mercy, all things are possible.

The study is also dedicated to all members of the nursing profession, who continue to work hard and give their utmost even in the most unfavourable conditions, continuing to learn more and teach others unstintingly.

Last, but not least, the dedication goes to all members of my family, particularly Zwelakhe, Bolla and Limpho, for all their untiring patience and assistance. May God bless you.

ACKNOWLEDGEMENTS

The following people are the recipients of my lasting sincere and humble gratitude:

- My study supervisor, Ms. A.M. Tshabalala. Unending thanks for all your guidance, patience and persistence; your sheer unwillingness to give up until the goal was reached; you kept me motivated even through the driest seasons of hard work.
- Professor Lize Maree, your assistance in co-coding and valuable advice on qualitative analysis is highly appreciated. Your efforts helped to put me back on track and keep my feet firmly on the ground, rather than get lost in the theory.
- All the nursing staff who participated in this study. Your voices gave me the impetus to apply my abilities to complete the project. Your forthrightness and willingness to speak unreservedly are much appreciated.
- Members of the staff in the Department of Nursing Education for assistance and encouragement given to me throughout the period of this study.

ABSTRACT

The World Health Organization states that childhood malnutrition remains a critical but preventable public health problem. The condition contributes to a large percentage of morbidity and mortality in children below five years of age. The health and development of this age group is monitored in the Growth Monitoring and Promotion (GMP) program. The GMP is a focus area of the Integrated Nutrition Programme, which is a nutrition strategy located within the Primary Health Care framework.

The Growth Monitoring and Promotion service implements, within the Child Health service, strategies and interventions that aim to improve the nutritional status of children below the age of five.

The identification, surveillance and monitoring of undernourished children relies heavily on information gathered at primary health care level. Factors such as difficulties in compiling statistics and in following up on malnourished children, and lack of expertise and time for counselling the caregiver, can result in the GMP service being less effective.

The aim of this study was to answer the following question: What factors, identified from the experiences of Child Health Nurses, have an effect on the quality of the GMP service? To answer this question, three objectives were formulated: these were to explore and describe the experiences of the Child Health Nurses in managing malnourished children in the GMP service, and to identify the challenges facing them in the service. Recommendations for improvement would also be found from the Child Health nurses.

To achieve the study objectives, a qualitative, exploratory and descriptive approach was used as a research design to investigate the GMP service from the perspective of Child Health Nurses who run the child health clinics.

A purposive sampling method was used to select participants for in-depth interviews. The population consisted of 14 Child Health Nurses. Interviews were conducted and data saturation was achieved after 6 interviews. Data were analysed using a thematic content analysis approach.

The study found that information exchange forms a major part of the GMP service and has the components of counselling, recoding and reporting. Another finding was that there are organisational factors which affect the effectiveness of the service, relating to human and material resources, amongst others. Emotional consequences of the factors were also found to play a part.

Conclusions reached from the findings were that the sharing of information played a major role in the GMP service, but could be hindered by challenges mainly stemming from service-related factors which could affect provision of the service. These included limited opportunity to engage appropriately with parents, inadequate record keeping, shortage of human and material supplies and factors related to parents and caregivers.

Emotional consequences – either from the poor growth of the child, or the unfavourable conditions which affect the service – could also affect both parents or service providers.

Suggestions for the improvement of the service were elicited from the study participants, as well as recommendations for further research from the researcher.

TABLE OF CONTENTS

	Page
Declaration.....	ii
Dedication.....	iii
Acknowledgements.....	iv
Abstract.....	v
Table of Contents.....	vii
List of Tables.....	x
List of Abbreviations.....	xi
1. Chapter 1: An Overview of the Study.....	1
1.1 Orientation to the Study.....	1
1.2 Literature Review.....	3
1.3 Problem Statement.....	8
1.4 Operational Definitions.....	9
1.5 Research Aim.....	9
1.6 Research Question.....	9
1.7 Research Objectives	9
1.8 Significance of the Study.....	10
1.9 Research Design and Methods.....	10
1.9.1 Setting.....	10
1.9.2 Population and Sampling.....	11
1.9.3 Data Collection and Analysis.....	11
1.10 Ethical Considerations.....	12
1.11 Organisation of Chapters.....	12
1.12 Conclusion.....	12
2. Chapter 2: Research Design and Methods.....	13
2.1 Introduction.....	13
2.2 Research Design.....	13
2.2.1 The Study Context.....	14
2.2.2 Qualitative Methodology.....	14
2.2.3 Explorative and Descriptive Design.....	15
2.3 Population and Sampling.....	16
2.3.1 Sampling Method.....	16
2.3.2 Study Setting.....	17
2.3.2.1 Sample Selection	17
2.3.3 The Recruitment Process.....	18

Page

2.3.4	Data Collection.....	18
2.3.4.1	Data Collection Method	18
2.3.4.2	Data Collection Tool.....	19
2.3.4.3	Data Collection Process.....	19
2.3.4.4	Data Analysis.....	20
2.3.4.5	Data Analysis Process.....	20
2.4	Trustworthiness.....	24
2.4.1	Introduction.....	24
2.4.2	Transferability.....	24
2.4.3	Credibility and Confirmability.....	25
2.4.4	Dependability.....	26
2.4.5	Measures to Ensure Dependability.....	26
2.4.5.1	The Audit Trail.....	26
2.4.5.2	The Audit Process.....	26
2.5	Ethical Considerations.....	27
2.5.1	Institutional Review and Approval.....	27
2.5.2	Privacy, Confidentiality and Anonymity.....	27
2.6	Conclusion.....	27
3.	Chapter 3: Discussion of Study Findings and Literature Control.....	28
3.1	Introduction.....	28
3.2	Presentation of Findings and Literature Control.....	28
3.2.1	Participant Demographics.....	28
3.2.2	Themes and Categories Identified.....	29
3.2.2.1	Theme 1: Factors affecting delivery of the service.....	30
3.2.2.1.1	Category 1: Organisational factors.....	30
3.2.2.1.2	Category 2: Parental issues.....	47
3.2.2.2	Theme 2: Emotional consequences.....	52
3.2.2.2.1	Category 1: Parental issues.....	52
3.2.2.2.2	Category 2: Nurse issues.....	53
3.2.2.3	Theme 3: Participants' recommendations for improvement.....	55
3.2.2.3.1	Category 1: Organisational factors.....	56
3.2.2.3.2	Category 2: Parental factors.....	59
3.2.2.3.3	Category 3: Nurse-related factors.....	60
3.3	Summary of the Findings.....	60
4.	Chapter 4: Conclusions and Recommendations.....	62
4.1	Introduction.....	62
4.2	Summary of the Study.....	62
4.3	Discussion of the Findings.....	63
4.3.1	Introduction.....	63

Page

4.3.2	Factors affecting the delivery of the service.....	63
4.3.3	Emotional consequences.....	64
4.4	Conclusions.....	65
4.5	Limitations of the Study	65
4.6	Recommendations.....	65
4.6.1	Recommendations from Study Participants.....	65
4.6.2	Recommendations for Nursing Practice.....	66
4.6.3	Recommendations for Nursing Education and Training.....	66
4.6.4	Recommendations for Nursing Research.....	67
4.7	Final Conclusion.....	67
References.....		68
Annexure A: Interview Guide.....		74
Annexure B: Approval from Health Sciences Post Graduate Committee.....		75
Annexure C: Ethical Clearance Certificate: Human Research Ethics Committee (Medical)		76
Annexure D: Request to the City of Johannesburg for Permission to Conduct Study.....		77
Annexure E: Approval from the Gauteng Department of Health and Social Development (Policy, Planning and Research Committee).....		78
Annexure F: Letter from the City of Johannesburg for Permission to Conduct Research...		84
Annexure G: Participants' Information Letter.....		85
Annexure H: Consent Form for Interview.....		86
Annexure I: Consent Form for Audio-Recording.....		87
Annexure J: Transcript Specimen.....		88

LIST OF TABLES

	Page
Table 3.1 : Respondent demographics.....	30
Table 3.2 : Themes and categories identified.....	31

LIST OF ABBREVIATIONS

ANC	–	Ante Natal Clinic
CoJ	–	City of Johannesburg
CHN	–	Child Health Nurse
DoH	–	Department of Health
DBSA	–	Development Bank of Southern Africa
DHS	–	District Health System
EPI	–	Expanded Programme on Immunization
FP	–	Family Planning
HIS	–	Health Information System
IMCI	–	Integrated Management of Childhood Infections
INP	–	Integrated Nutrition Programme
NCHS	–	National Centre for Health Statistics
PCR	–	Polymerase Chain Reaction
PHC	–	Primary Health Care
PMTCT	–	Prevention of Mother to Child Transmission
RtHC/B	–	Road to Health Card/Booklet
SAVACG	–	South African Vitamin A Consultative Group
SFS	–	Supplementary Feeding Scheme
TB	–	Tuberculosis
UNICEF	–	United Nations Children's Fund
WHO	–	World Health Organization

CHAPTER 1

AN OVERVIEW OF THE STUDY

1.1 ORIENTATION TO THE STUDY

Malnutrition refers to an impairment of health which results from a deficiency, excess or imbalance of nutrients; it includes under-nutrition, a deficiency of energy and one or more nutrients, or an excess of one or more nutrients (Department of Health, 2010: 5).

The weight for age index in young children, from birth to five years of age, serves as an index of nutritional status; is it thus widely used to assess protein-energy malnutrition or over-nutrition (Department of Health, 2001: 10).

The nutritional status of children is usually described in terms of anthropometry, or the body measurements of children below the age of five years, such as weight in terms of age or height. Low weight for age is a measure of the degree of under-weight or wasting, which is acute weight loss. Height in terms of age would be a measure of stature. Low height for age is an indication of long term or chronic under-nutrition, where the child has linear growth retardation. Furthermore, the nutritional status of children is a good proxy indicator for the state of health of a community or population (Development Bank of Southern Africa, 2008: 6).

It is estimated that 32% of the global burden of disease would be removed by the elimination of malnutrition, including micronutrient deficiency (Development Bank of Southern Africa, 2008: 4). In the 2003–2004 Saving Babies Pilot Survey of Child Healthcare in South Africa, it was found that 69% of the dead children whose weight was known were underweight, some due to severe malnutrition. The authors state that being underweight more than doubles the case fatality rate for infectious diseases (Development Bank of Southern Africa, 2008: 16).

Globally, the World Health Organization (WHO) estimates that, every year, more than 20 million children present with low weight at birth. While 150 million children younger than 5 years have low weight patterns for their age, 182 million have low height for their age (known as stunting) (Monte, 2000: 286). More recently, the WHO reports that approximately 33% of child mortality (down from 50% in the 1990s) is attributable to malnutrition, which is still unacceptably high (O'Neill, Fitzgerald, Briend et al, 2012: 520).

The countries with the highest burden of malnutrition are in the Western Pacific, Middle East and Africa; these countries also have a stunting prevalence of above 20% (Bryce, Coutinho, Darnton-Hill et al, 2008: 514).

Sub-Saharan Africa and South Asia account for 41% and 34% of global child deaths respectively. Neonatal diarrhoea, pneumonia and malaria are the main reported causes of mortality in children below the age of five years, but malnutrition as an underlying cause does not routinely appear in statistics, so its importance is overlooked (Jackson, Ashworth and Khanum, 2006: 1).

The South African Vitamin A Consultative Group (SAVACG) of 1995 found the South African prevalence of under-weight to range from 7.1% in 6–11 month olds, peaking to 10.2% in 12–24 old month infants, and ranged between 9%–9.9% in 6–71 month olds (Bourne, Hendricks, Marais and Eley, 2007: 231).

Locally, in Gauteng, the National Food Consumption Survey of 1999 showed that at least 20.4% of children between the ages of 1–9 years were stunted, with children 1–3 years most affected, while 8.8% of children were underweight for their age (City of Johannesburg, 2005: 1).

The significance of this is that malnutrition contributes to the global burden of disease, and yet it is a problem that is amenable to prevention and management through strategies that could combat the problem, such as Growth Monitoring and Promotion.

In 2006, the WHO released new standards of assessing the growth and development of children from birth to five years of age, based on an international sample of healthy children likely to achieve their genetic potential. The WHO Child Growth Standards were developed to replace the National Centre for Health Statistics/WHO Child Growth reference standards (Yang and de Onis, 2008: 2).

Growth Monitoring and Promotion (GMP) involves the regular measurement, recording and interpretation of the child's growth over a period of time with the purpose of promoting child health in the Primary Health setting. (City of Johannesburg, 2005: 1).

The GMP service is an important feature of a nutritional surveillance system (Jinabhai, Taylor and Sullivan, 2005: 14). Nutritional surveillance systems can be used as variables to identify individuals at risk of malnutrition in groups (DoH, 2001: 14). The identification could contribute to the development of a global database defined by the WHO on child growth and

malnutrition in monitoring trends in over- and under-nutrition, particularly the co-existence of stunting and obesity in children, as these are risk factors for chronic disease in adulthood (Larsen, Mandleco, Williams et al, 2006: 71).

Child Health Nurses perform the function of monitoring the growth of young children in child health clinics in the Primary Health Care (PHC) setting, where children below the age of five are also immunised and treated for minor ailments, and their parents are counselled. A primary responsibility of Child Health Nurses is collection, collation and reporting of data.

Data collected daily at the PHC level are used for monthly monitoring of the scheme, as well as to compile statistics for the percentage of malnourished children in the community. Thus the focus of the service is identification of all under-nourished children and management of malnutrition. The data is also collated and forwarded to the Provincial Sub-directorate Nutrition and from there to the National Office on a quarterly basis for annual evaluation of the programme from a broader perspective.

The policy guidelines document for Growth Monitoring and Promotion (GMP) of the City of Johannesburg (CoJ, 2005: 1) states that the primary objective of this policy is to promote optimal growth and development of young children; furthermore, to detect early growth faltering so that health workers (Child Health Nurses) can intervene before the child becomes malnourished.

The effectiveness of the programme will be achieved by ensuring that adequate resources, relating to such as personnel and fiscal, are allocated to this activity. The overall purpose will be to improve the capacity of health facilities/clinics to offer the service while also monitoring the effectiveness and delivery of the programme (CoJ, 2005: 2).

The City of Johannesburg GMP guidelines will therefore be adopted in this study as the theoretical framework for exploring the Child Health Nurses' experiences related to managing the GMP service.

1.2 LITERATURE REVIEW

Malnutrition in children, especially those under five years of age, is a widespread problem that contributes to the global burden of disease. In 1978, the International Conference on Primary Health Care (organised by the WHO and UNICEF, and held at Alma Ata in the USSR) declared Primary Health Care as vital for the provision of maternal and child health services, including family planning (WHO, 1978: 1). In a further attempt to address maternal

and children's health, the WHO and UNICEF introduced a new selective approach in 1983. Growth monitoring, oral rehydration, promotion of breastfeeding and the expanded program of immunisation (GOBI) were four programmes introduced to counteract the high morbidity and mortality of infants and children in the developing world (Dennill and Rendall-Mkosi, 2012: 16).

In 1990, 189 United Nations member states committed to a set of eight Millennium Development Goals (MDGs) comprising of 18 targets, which were later adopted (in the year 2000) by the United Nations General Assembly as part of the Millennium Declaration (DBSA, 2008: 4). The United Nations' intention was to focus resources and efforts toward the critical issues of global poverty, health and sustainability. Reducing child mortality was one of the goals suggested. The MDGs set numerical targets to be achieved by 2015, using socioeconomic, environmental, nutritional and health indicators to monitor progress towards these targets (Gakidou, Oza, Fuertes et al, 2007: 1876). Specific targets for maternal, infant and young child nutrition identified by the WHO included reducing maternal anaemia, low birth weight and stunting. An additional target proposed is childhood obesity, a condition increasingly prevalent in many areas of the world. Establishing national targets will help when developing policies and programmes and when calculating the level of resources needed to implement comprehensive plans for maternal and child health (WHO 2012: 2).

Sixteen years after the PHC Alma-Ata Conference in 1994, the idea of mainstreaming Primary Health Care came up for South Africa (Kautsky and Tollman, 2008: 18). The idea had been fuelled by international endorsement of Primary Health Care as a means to achieve 'health for all'. In the few years prior to 1994, the African National Congress developed the National Health Plan, seeking to eliminate fragmentation and duplication of services. They intended to restructure the National Health delivery system as a decentralised, comprehensive, community-based District Health System (DHS) under a single Ministry of Health (Kautsky and Tollman, 2008: 23).

In 1994, the South African government began to restructure the National Health system according to the Primary Health Care (PHC) approach. A White Paper released in 1997 described DHS policies dealing with a range of issues for the transformation of the health sector (Kautsky and Tollman, 2008: 23).

A range of pro-equity policies and programmes were initiated as part of the Reconstruction and Development Programme (RDP). The process also introduced other aspects of primary health such as free health care and extension of social welfare; it culminated in the transformation of the existing different health systems, and the implementation of Primary

Health Care as the strategy to deliver health care to communities (Kautsky and Tollman, 2008: 24).

The Integrated Nutrition Programme (INP) is a plan for the implementation of a comprehensive nutrition strategy, derived from the WHO and UNICEF (Swart, Sanders and McLachlan, 2008: 135). The South African National Department of Health initiated the INP in 1995 to address and prevent malnutrition, with the goal of optimum nutrition for all. Its comprehensive approach involved using effective communication, to improve awareness of the importance of good nutrition, and to promote practices that could change nutrition-related behaviour in the public (Bourne, Hendricks, Marais et al 2007: 236).

The INP is situated within the PHC framework and has a conceptualisation that is informed by the PHC approach (Swart, Sanders and McLachlan, 2008: 135). These authors state that from a PHC perspective, the circumstances of chronic malnutrition need to be addressed by a comprehensive set of actions which span therapeutic, rehabilitative and health-promoting strategies, with an emphasis on social determinants of nutritional health. The programme facilitates a coordinated integrated approach for a number of programmes that are responsible for solving nutrition problems in infants and young children at a PHC facility (Hendricks, Goeiman and Dhansay, 2007: 252).

Nutrition interventions delivered as part of the child health programme along with INP include IMCI (Integrated Management of Childhood Infections); while the stimulus for IMCI is inclusive of appropriate curative care, the strategy also includes immunisation and especially growth nutrition and promotion (Hendricks, Goeiman and Dhansay, 2007: 254).

Strategic priorities for South Africa identified for the National Health System included decreasing morbidity and mortality through strategic interventions in the areas of Child Health – involving strengthening surveillance and management systems, implementation of the IMCI, and expansion of the Prevention of Mother to Child Transmission (PMTCT) programme (DoH, 2004: 8). Priorities mentioned related to implementing a series of strategies to improve nutrition, given the relatively high levels of wasting and stunting found in the 1999 Food Consumption Survey (20.4% and 8.8% stunting and under-weight rates respectively among children 1–9 years of age). Notably, promoting exclusive breastfeeding and food-based dietary guidelines were specifically mentioned (DoH, 2004: 8).

In May 2011 (following the 2004–2009 review), South Africa (like other countries experiencing problems with nutrition-related disease) requested the World Health Assembly for draft targets on their 2010 resolution to develop a comprehensive implementation plan on

infant and young child nutrition, a critical component of a global multisectoral nutrition network. The development of revised global targets on the implementation plan was considered and resulted in a draft report on maternal, infant and young child nutrition (WHO, 2012: 1).

The WHO states that targets should be established to help address the burden of nutrition conditions that are responsible for nutrition-related morbidity and mortality; global targets are also meant to provide a benchmark for the international community to measure achievements, identify gaps and trigger corrective actions (WHO, 2012: 2).

One such global target is a 40% reduction, by the year 2022, in the number of children under the age of five whose growth is stunted, compared to the 2010 baseline. The WHO states that this target complements the Millennium development target of reducing the number of children who are underweight, as this is the largest cause of death and disability-adjusted life years in this group (WHO, 2012: 3). Another target promotes an early investment in health with good growth for a healthy start in life (WHO, 1998: 16).

The Department of Health released a report on the progress achieved in the 2009–2014 period with a focus on the strategic priority of improving the health profile of all South Africans. Achieving MDGs 4 and 5, which refer to reduction in maternal and child mortality rates, was identified as the second output towards the outcome of a long and healthy life in a National Service Delivery Agreement (DoH, 2011: 6).

The GMP service is also one of the focus areas of the nutrition strategies within the INP which forms an integral part of PHC (Swart, Sanders and McLachlan, 2008: 135). This service has been promoted as one of the key components of critical preventive care for children. It aims to meet Millennium Development Goals in alignment with global targets, and targets within relevant policy frameworks such as the Infant and Young Child Feeding Policy [United Nations Children's Fund (UNICEF), 2007: 3; WHO, 2012: 2].

South Africa faces a vast and growing burden of disease, shown by the persistence of infectious diseases and high infant and child mortality. Substantial increases in mortality and morbidity threaten to overwhelm the health care system and pose challenges in achieving the Millennium Development Goals (Chopra, Lawn, Sanders et al, 2009: 19).

Baseline data from the WHO Global Database on Child Growth and Malnutrition shows that in 2010, an estimated 171 million children (167 million from developing countries) were stunted. Fifty-five countries have national stunting rates above 30% (WHO, 2012: 4).

In Africa, although there had been a decline of poverty from 45.9% in 1999 to 41.1% in 2007, the target of halving extreme poverty by 2015 required that the pace be doubled (Klopper, 2007: 298). The stunting prevalence is 38% and does not show a substantial decreasing trend (WHO, 2012: 12).

Mortality rates and life expectancy have regressed to levels of previous decades. The 2007 United Nations World Bank report indicates a drop in child mortality from 185 in 2005 to 166 per 1 000, though this hardly makes a dent in the objective of a two thirds reduction by 2015. Maternal health reflects a regional figure of 1 in 6 women dying of complications relating to pregnancy or childbirth compared to 1 in 3 800 in the developed world (Klopper, 2007: 298–300).

South Africa, like other developing countries, is in a nutrition transition phase, in which conditions of under-nutrition, notably stunting and micronutrient deficiencies, coexist with a rising incidence of over-nutrition. This represents a malnutrition problem of public health significance (DoH, 2010: 7). In the Input Paper for Health Roadmap, the Southern African Development Bank (2008: 8) states that there have been two national nutrition surveys conducted in South Africa in the last 10 years: the 1999 National Food Consumption Survey (NFCS) 4 and the 2005 NFCS-FB (Fortification Baseline)-I11. Comparing results of the two surveys shows that stunting and under-weight remain by far the most common nutritional disorders, affecting almost one in five and almost one in ten children respectively.

The Department of Health (2010: 7) states in the national nutrition survey of 2005, it was found that the national average prevalence of stunting has decreased from 21.6% to 18%, with the overall best improvement in the rural areas (26.5% to 20.3%). Despite the national prevalence remaining statistically unchanged at 9.3%, the prevalence of under-weight appears to have increased among children living in urban areas, and decreased in rural areas, with the greatest improvement among children living in the formal rural areas (18.1% to 12.9%).

At the provincial level, in 2008, the prevalence of both stunting and under-weight was the highest among children in the Northern Cape (27.7% stunted, 38.3% underweight) and the Free State (28.2% stunted, 14.1% underweight). Likewise, national prevalence of wasting remained statistically unchanged but appeared to have decreased in rural areas (from 4.9 to 3.8%), but more than doubled in urban areas (from 2.4 to 5.1%) (Southern African Development Bank (DBSA), 2008: 11–12).

In the Gauteng province in 2003, the rate of stunting was found to be 18.2%, while under-weight for age was found to be 15.4% (Zere and McIntyre, 2003: 8). By 2005, the prevalence for Gauteng province was found to be 16.8% for stunting and 6.4% for under-weight (DBSA, 2008: 10).

Despite various programmes that seek to address nutrition-related problems in the health system, child under-nutrition rates have worsened in South Africa in general, with stunting and under-weight remaining the most common problems, affecting 1 out of 5 children and 1 out of 10 children respectively (DBSA, 2008: 3).

According to the policy guidelines for GMP in the City of Johannesburg (CoJ, 2005: 4), children under five years are expected to be weighed at all clinic visits, with a minimum of 6 occasions related to their immunisation visits or vitamin A supplementation. Children at risk of under-nutrition and those with growth faltering should be monitored more frequently (as often as monthly or even fortnightly) and targeted specifically when the need arises, until they have recovered. From monthly information gathered from region D clinics, there are indications that some operational aspects of the GMP service in the region are not adhered to.

1.3 PROBLEM STATEMENT

According to the WHO, childhood malnutrition remains a critical and preventable public health problem throughout the developing world and is considered to be an urgent global health issue. It is also an impediment to productivity, economic growth and poverty eradication (DBSA, 2008: 4). Poor linear growth or stunting in children is associated with poor functional outcomes, including poor adult stature, reduced body mass, poor cognition and educational functioning, and therefore low productivity. Women who have been stunted as children deliver lower birth-weight infants, thus contributing to the intergenerational cycle of malnutrition (WHO, 2012: 3).

Poor nutrition is implicated in severe infections and accounts for 70% of mortality among children under the age of 5 years in the developing world (DBSA, 2008: 4). Moreover, early childhood under-nutrition increases adult risk of chronic disease if children gain weight rapidly later in childhood and adolescence (DoH, 2010: 7).

Malnutrition (under-nutrition) contributes to 60% of all child deaths. Stunting and wasting, along with intra-uterine growth restriction, are responsible for 2.1 million deaths in children <5

years of age (Imdad, Yakoob and Bhutta, 2011: 2). However, health professionals, policy makers and donor agencies often fail to recognise its relevance to child survival (Jackson, Ashworth and Khanum, 2006: 1).

The identification, surveillance and monitoring of undernourished individuals, in this case, children, relies heavily on information gathered at primary health level. Child Health Nurses appear to have difficulties in compiling statistics, also in following up on the malnourished children identified. This seems to suggest that nurses handling GMP may have hitherto unexplored challenges.

The researcher hopes that, through exploring the experiences of Child Health Nurses managing the GMP programme, factors that impact on the service will be identified.

1.4 OPERATIONAL DEFINITIONS

- a) **Child Health Nurse** – A professional nurse, qualified in Community Health Nursing (City of Johannesburg, 2013:1).
- b) **Child health/well baby/under-fives clinic** – A clinic where children are seen regularly for growth monitoring, immunisation and treatment of minor ailments; includes IMCI (Integrated Management of Childhood Illness (City of Johannesburg, 2013:1).

1.5 RESEARCH AIM

The aim of this study was to explore factors that affect the effectiveness of the GMP programme from the perspective of Child Health Nurses.

The researcher's anticipation was that through an explorative and descriptive approach, the Child Health Nurses' challenges, needs and opportunities for improvement could be identified.

1.6 RESEARCH QUESTION

What factors, explored from the experiences of Child Health Nurses, have an impact on the quality of the Growth Monitoring and Promotion service?

1.7 RESEARCH OBJECTIVES

The purpose of the study was addressed through the following objectives:

- a) To explore and describe Child Health Nurses' experiences of managing child malnutrition in the GMP service
- b) To explore and describe the challenges faced by the Child Health Nurses in the service.
- c) To give the Child Health Nurses an opportunity to make recommendations to enhance their working environment and thereby improve the operation of the concerned function.

1.8 SIGNIFICANCE OF THE STUDY

The study findings could help city policy-makers, as well as the users and service providers of GMP, to improve the GMP service, not excluding the quality of screening and surveillance data reported. (Understanding the challenges can have a positive impact on service quality.)

1.9 RESEARCH DESIGN AND METHODS

According to Burns and Grove (2007: 211) research design refers to the researcher's overall method (or plan) of achieving the intended aim and objectives of the research, to answer the research question. To answer the question and achieve the stated objectives of the study, a qualitative, contextual, descriptive, explorative approach was used to understand the experiences of Child Health Nurses.

Qualitative research is often described as holistic, i.e. concerned with humans and their environment in all their complexities, and naturalistic, i.e. without any researcher-imposed constraints and controls (Polit, Beck and Hungler, 2001: 207). Qualitative research methods are useful when a study has a purpose such as exploring and describing social psychological processes or a social world, culture or setting. Polit et al (2001: 212) state that it uncovers what people experience and how they interpret these experiences.

1.9.1 Setting

The research was conducted in Region D Local Government clinics that offer the child health service. This region is one of nine health sub-districts within the city of Johannesburg (in the Gauteng Province). The D region consists of Soweto and the area previously called Diep-Meadow. There are 21 clinics which serve a population of approximately 2 million residents. Of the 21 clinics, only local government clinics that offer mainly preventative and promotive services (N=14) were included in the study. The other clinics (N=7) were excluded as they

render mainly curative services, and they lack nurses experienced in running child health clinics.

1.9.2 Population and sampling

The study population consists of Child Health Nurses (N=14) in the region. Purposive sampling was used to select participants for in-depth interviews. Purposive sampling is a strategy where individuals with particular characteristics are selected (Burns and Grove, 2007: 352); only nurses involved in the GMP programme were chosen. Sampling continued until data saturation was achieved.

1.9.3 Data collection and analysis

The objectives of the study were achieved through conducting in-depth interviews. A semi-structured interview guide was used for data collection (Annexure A). All the purposively selected participants were asked one main open-ended question, followed by probes and follow-up questions until data saturation was achieved. Interviewing is a flexible technique that can allow the researcher to explore greater depth of meaning than with other techniques (Burns and Grove, 2007: 540). These interviews also offer an opportunity for thick description, in which a researcher must supply a sufficient amount of clear and detailed information so that a reader is able to transfer the findings to contexts outside the study setting (Burns and Grove, 2007: 540).

Qualitative data analysis was conducted simultaneously with data collection to get a sense of emerging concepts for content analysis. Content analysis is designed to classify the words in a text into a few categories because of their theoretical importance. The technique provides a systematic means of measuring the frequency, order or intensity of words, phrases or sentences, but involves more than counting words; it is concerned with meanings, intentions, consequences and context. The researcher may be looking for relations among ideas, reality and language (Burns and Grove, 2007: 554–555).

Trial run interviews were conducted with two Child Health Nurses working in a similar environment. The trial run assisted in refocusing the interview guide for clarity, and formed part of the main study.

Study participants were initially accessed at the monthly EPI Task Team meeting, where Child Health Nurses meet regularly to discuss issues pertaining to their work. A brief

overview of the study was presented to them, and the relevant approval documents were displayed for them (Annexures B, C, E, F and G). Arrangements to contact by telephone to secure appointments for them for participation in the study were then agreed upon. Further clarification is provided in the recruitment process section 2.4.4.

1.10 ETHICAL CONSIDERATIONS

A letter of approval to conduct the study was obtained from the Human Research Ethics (Medical) and Post Graduate Committees of the Faculty of Health Sciences at The University of the Witwatersrand. The researcher also sought permission from the City of Johannesburg, Department of Health Research Committee (Annexure B) to gain cooperation with regards to availability of the relevant staff members at suitable times to avoid disruption of services.

Informed written consent to conduct in-depth interviews as well as to record interviews on audiotape was obtained from all study participants (see Annexures C, D, and E).

Confidentiality was assured through requesting participants to choose a pseudonym. The recorded interviews were accessible to the researcher (or supervisor when required). Taped interviews and transcriptions were kept safely under lock and key. Participants were informed of their right to withdraw from the study at any time without any form of penalty.

1.11 ORGANISATION OF CHAPTERS

The chapters in this study are organised as follows:

Chapter 1: Orientation to the study

Chapter 2: Research design and methods

Chapter 3: Presentation and discussion of findings

Chapter 4: Conclusion and recommendations

1.12 CONCLUSION

In this chapter an overview of the study has been described to afford the informant of the rationale for the research study, beginning with the background of the issue of child malnutrition and its prevalence, short- and long-term effects. This was followed by the research problem, study purpose, objectives and significance. Relevant operational definitions were also given. A brief overview of the research design and ethical considerations then followed.

CHAPTER 2

RESEARCH DESIGN AND METHODS

2.1 INTRODUCTION

Methodology refers to the epistemological home of an inquiry, while the design type is a reflection of the practical requirements of the research question and therefore of the type of data that will be elicited, and of how the data will be processed (Henning, van Rensburg and Smit, 2004: 36). The purpose of this chapter was to present and discuss the overall approach used to investigate the experiences of Child Health Nurses managing malnourished children in the Growth Monitoring and Promotion (GMP) service, with the purpose of identifying factors that affect the effectiveness the service, as stated among the objectives of the policy (CoJ, 2005: 2).

Items for focus in the study included the challenges, requirements and opportunities for improvement from the perspective of the participants. In addition, the sampling method, data collection and analysis techniques are also described. In conclusion, an overview of the evaluation of the fidelity of the study, the measures used to safeguard the rights of the participants, and the means employed to obtain required documented permission to conduct the study (from the relevant sanctioning authorities) are set out.

The operational principles and objectives of the GMP policy guidelines, in terms of nutritional surveillance and promotion of optimal growth and development of young children, were adopted as the theoretical framework to direct the advancement of this study.

2.2 RESEARCH DESIGN

Research design is an exposition of the researcher's overall formulated plan to structure and execute the steps needed in order to achieve the intended aim and objectives of the study; its principal purpose is to answer the research question such that the validity of the findings is maximised (Mouton and Marais, 1996: 193; Burns and Grove, 2007: 211). In this instance a contextual, qualitative, explorative and descriptive approach was used.

This method was chosen because it is useful when a study has a purpose such as exploring and describing social psychological processes or a social world, culture or setting (Polit, Beck and Hungler, 2001: 212). Thus, in order to achieve the aim and the stated

objectives of this study, information was obtained from participants by means of semi-structured one-to-one interviews, and analysed by thematic content analysis. The intention was to gain understanding of the management of malnourished children in terms of the GMP service from the perspective of the Child Health Nurses in the region.

2.2.1 The Study Context

The context of an idea or event is the general situation that relates to it, and that contributes to it being understood; moreover, it is the circumstances relevant to an event, idea or statement (Collins Students' Dictionary, 2006). Similarly, contextual variables are those factors that could influence the implementation of an intervention, and thus the outcomes of a study; they include the social and environmental setting, and can influence intervention or study outcomes (Burns and Grove, 2007: 170).

Likewise, the natural setting in which the people under study live, work, learn and play is characteristic of qualitative research, in the understanding that data is best understood in the context in which it occurs.

According to Mouton and Marais (1996: 90), in discussing the research context, it is possible to distinguish between the spatio-temporal factors that are determined by the historical, socio-political and economic factors, and the narrower research setting within which the experiment, interview or observation is conducted. In this study, the environment and conditions under which child under-nutrition is managed was a focus.

Morse (1997: 170) states that the more we can know, feel, or understand about a variable of interest, the closer we will come to a full and complete meaning, but the meaning will always be context-laden, and therefore, changing and evolving. In addition, practice-derived theory may guide inquiry, in the sense that it may be used as a framework that places the research in a practice context, and serves to justify the proposed research as a nursing study.

2.2.2 Qualitative Methodology

The term 'qualitative research' represents many theoretical orientations that have led to a range of approaches and a variety of research designs in the social sciences (Chenitz and Swanson, 1986: ix; Brink, 2006: 113). The methodology is based on philosophical foundations that often describe it as holistic and naturalistic, i.e. concerned with humans and their environments in all their complexities, without any researcher-imposed constraints and controls (Polit, Beck and Hungler, 2001: 207). It involves broadly stated questions about human experiences and realities, studied through (sustained) contact with persons in

their natural environments, that produce rich, descriptive data that help us to understand those persons' experiences (Munhall, 2001: 92).

Qualitative methods are particularly useful when the purpose is to describe a phenomenon from the 'emic' perspective, in order to gain a specific person or group's insights about an experience; that is, to gain in-depth understanding of the nature of social settings from the native point of view. Participants' experiences are the findings of qualitative research; therefore, it is essential that they be reported from the perspective of those who have lived them (Streubert and Carpenter, 1995: 12).

In clinical research the emic perspective may be that of the patient, caregiver or relatives; in this instance, management of malnourished children was examined from the perspective of study participants, who are the Child Health Nurses directly involved in the GMP service, so that the context in which the phenomenon occurs is considered to be part of the phenomenon itself (Morse and Field, 2001: 8). The aim was to discover the challenges facing Child Health Nurses, derived from their experiences relating to prevention and efficient management of malnutrition in the GMP service; understanding these challenges could enhance and improve the effectiveness of the delivery of the service.

A single overriding purpose in qualitative research, in this scenario, is the establishment of a baseline of nursing knowledge that orients us to particular views on the nature of being human, and the realities of health and nursing (Munhall, 2001: 69). In this study, which looks at nurses dealing with children, growth and nutrition, it was hoped that some new insights might emerge pertaining to the nutritional surveillance aspect of the service.

2.2.3 Explorative and Descriptive Design

Exploration refers to a focused scrutiny and in-depth examination to discover aspects of the phenomenon under study (Polit, Beck and Hungler, 2001: 208). Exploratory studies examine new ideas and suggestions by following an open and flexible strategy, and lead to insight and comprehension of a research area (Mouton and Marais, 1996: 43).

Burns and Grove (2007: 67) state that four qualitative modes of inquiry have been identified in nursing; descriptive, explorative, emergent fit and intervention modes. Of these, the descriptive mode provides rich detail, while the discovery mode leads to the identification of patterns in life experiences of individuals and relates the patterns to one another. According to Chenitz and Swanson (1986: 16) the discovery mode (exploratory approach) asks the question, 'What patterns can be identified in the problem and how are these patterns

related?’ The purpose of the research is to gain more information about a particular field of study and to identify the core process that describes the characteristics of a particular social world by direct naturalistic examination, providing a picture of situations as they naturally occur (Chenitz and Swanson, 1986: 17; Burns and Grove, 2007: 232).

Exploration as a purpose of research investigates the full nature of the phenomenon and the other factors with which it is related; exploratory qualitative research is designed to shed light on the various ways in which a phenomenon is manifested and on underlying processes (Polit, Beck and Hungler, 2001: 19).

In this study, the explorative and descriptive modes were used for the purpose of examining current practice within the service, or indeed making judgments about Child Health Nurses’ experiences of managing malnourished children, or determining what others in similar situations are doing (Burns and Grove, 2007: 232); challenges facing them were thus identified in order to describe factors affecting the GMP service. Here, to paraphrase two experienced authors, the intention was to examine and identify the characteristics of the service under investigation in the study, and thereby, to accomplish a description of what is taking place in that social setting (Morse and Field, 2001: 23).

It is hoped that the findings may shed insight on how to improve the capacity of health facilities to offer the GMP service (CoJ, 2005: 2). The emphasis is on achieving understanding that will, in turn, open up new options for action and new perspectives that have the potential to change people’s lives (Munhall, 2001: 68).

2.3 POPULATION AND SAMPLING

The individuals of a population are called the elements. The target population is the entire aggregate of elements who meet the sampling criteria, whereas the accessible population is the portion of the target population to which the researcher has reasonable access. The sample is obtained from the accessible population by a process of deliberate selection of desirable participants.

The study population in this project consisted of Child Health Nurses (N=14) working in clinics in region D of the City of Johannesburg, Gauteng Province.

2.3.1 Sampling Method

The study sample was selected by means of a purposive sampling method, which is also referred to as judgmental or theoretical sampling. The participants represent a theoretical

population in that they are spokespersons for the topic under inquiry, hence the term theoretical sampling (Henning, Van Rensburg and Smit, 2004: 771). This sampling method involves the conscious selection by the researcher of certain elements (individuals) with particular characteristics who meet the study criteria, or who are especially knowledgeable and may be a meaningful source of knowledge about the question at hand, and who can shed optimal light on the issue under investigation (Munhall, 2001: 231; Henning, van Rensburg and Smit, 2004: 71; Brink, 2006: 133).

In this study, therefore, Child Health Nurses who manage the GMP service, deal with the issue of malnutrition on a daily basis, and thus have information on the subject, were selected. Morse (1989: 129) states that purposeful or theoretical sampling refers to when a researcher obtains participants according to the needs of the study.

Purposive sampling was employed to select the participants for in-depth interviews. In this strategy, which has been criticised because it is difficult to evaluate the precision of the researcher's judgment (Burns and Grove, 2007: 352), the qualitative researcher decides on and indicates particular inclusion criteria to increase understanding of a particular facet of the phenomenon being studied. Thus she chooses to interview informants with a broad, general knowledge of the topic and whose experience is considerable (Morse, 1989: 129). The inclusion criteria in this study were that participants had to be Child Health Nurses who had been in the service for a minimum of five years.

2.3.2 Study Setting

Region D is one of nine health sub-districts within the City of Johannesburg, Gauteng Province, South Africa. The region consists of the area of Soweto and what was formerly known as Diep-Meadow, and has 21 clinics which serve a population of approximately two million residents. Of these 21 clinics, those offering mainly preventative and promotive (and therefore child health) services under the competency of the tier of Local Government (N=14) were included in the study. Of these 14, one clinic is a mobile service point. The remaining seven clinics offer mainly curative services under Provincial authority and are not part of the study as they lack nurses experienced in running child health services.

2.3.2.1 Sample Selection

This section deals with the study participants and the method of their selection from the entire aggregate of persons that met the specified set of study criteria.

2.3.3 The Recruitment Process

The preliminary stages of the process to achieve the objectives of the study involved a recruitment strategy prior to conducting of the interviews.

The recruitment process commenced with the researcher requesting, and obtaining permission, to be present at one of the EPI (Expanded Programme on Immunization) Task team meetings. At these meetings, which are held monthly in the region, Child Health Nurses from each clinic meet to discuss issues related to the child health programme, or they may have presentations of updates or in-service training. The monthly task-team meetings therefore presented the researcher with an opportunity to make a brief presentation about the study to the nurses present on that day.

A brief overview of the study purpose, design and data collection method was given, and some of the relevant documents were displayed, particularly the Professional Nurse information letter (Annexure B), permission letters from the Director of Health services (CoJ), and the City of Johannesburg Research Committee Chairperson, granting permission to conduct the study, and the consent forms that would be signed to participate in the study. The potential study participants were then informed of the recruitment process, which would include a telephonic request to finalize arrangements to participate in the study from each participant.

When a person had agreed to participate, an appointment suiting them would then be set up with the researcher. A further telephone call was made to each clinic manager to obtain permission to conduct the interview at the clinic during working hours, in the afternoons when the researcher and prospective participants had completed their patient consultations for the day. The researcher would then pay the participant a visit at the clinic where she worked to conduct the interview. On the day of the visit, the clinic manager was seen and presented with the relevant permission documents obtained from management and the institution approving the study (Annexures B, C, D, E and F).

2.3.4 Data Collection

2.3.4.1 Data collection method

In this study interviews were used as a means of exploring and gathering experiential narrative material as a resource for developing a richer and deeper understanding of a human phenomenon. Furthermore, they were used as a vehicle to develop a conversational relation with a participant about the meaning of an experience (Morse, 1994, 16).

The interview method is focused and discursive, and allows the researcher and participant to explore an issue. It attempts to understand the world from the participant's point of view, and thus can be used to determine individuals' perceptions, opinions, facts and forecasts, and their reactions to initial findings and potential solutions (De Vos, 2002: 292).

Semi-structured interviews are a flexible technique designed to elicit a vivid picture of the participants' perspective on the research topic, and that can allow the researcher to explore greater depth of meaning than with other techniques. They are very effective in giving a human face to research problems, offering participants the opportunity to express themselves in a way that ordinary life rarely affords them (Burns and Grove, 2007: 377).

2.3.4.2 Data collection tool

Data collection was achieved through conducting individual in-depth interviews, using a semi-structured interview guide (Annexure A). The data collection tool consisted of an interview guide with one main question: "Please tell me of your experiences of managing malnourished children in GMP." The rest of the interview guide consisted of probing questions to expand on and clarify relevant aspects of the interview. Demographic data was collected on a separate sheet.

2.3.4.3 Data collection process

Pilot study

Trial run interviews were initially conducted on two Child Health Nurses working in a similar environment. The trial run assisted in gaining clarity and refining the methodology, and was then used as part of the main study. It was also useful in directing and structuring questions for subsequent interviews.

Participants in the trial run and successive interviews were asked to recommend other possible participants. In this way six participants, at six different clinics, were finally selected.

On arrival at each clinic where a prospective participant had agreed to participate, the facility manager was supplied with the relevant permission documents (Annexures B, C, D, E, F, H and I) prior to the interview. A quiet, private area of the clinic, usually the participant's consulting room, would be used for the interview. The participant was then given the information letter to read; she was then offered the consent forms for the interview and the audio-recording to sign.

All the selected participants were asked one open-ended question, followed by probes and follow-up questions until data saturation was achieved.

2.3.4.4 Data analysis

Qualitative data analysis was done in this study by the use of thematic content analysis which occurred concurrently with the use of the constant comparative method. In accordance with this method, the researcher simultaneously collected, coded and analysed data to obtain a sense of emerging concepts for content analysis.

Thematic analysis involves the search for and identification of common recurring significant or relevant threads that extend throughout an entire interview or set of interviews (Van Zyl, 2010: 1); frequently, these themes are concepts indicated by the data (Morse and Field, 2001: 114–115). Henning, van Rensburg and Smit (2004: 109) state that the aim is to obtain the thematic range of the data.

The constant comparative method guided the generation and treatment of data; the process combines an analytic procedure of constant comparison with an explicit coding procedure for generated data. The method is concerned with generating and plausibly suggesting many categories, properties and hypotheses about general problems; the aim of this method is the generation of (theoretical) constructs along with substantive codes and categories and their properties (Streubert and Carpenter, 1995: 150).

Coding embodies the capture of processes, and the making of comparisons that lead to the discovery and conceptualisation of underlying patterns that require further investigation. As reading progresses, meaning can be elicited from the data in a systematic, comprehensive and rigorous manner. Incident is compared to incident, incident with category, and, finally, category with category or construct with construct (Streubert and Carpenter, 1995: 150).

2.3.4.5 Data analysis process

In this study the process of data analysis began with verbatim transcription of each of the interviews from the audio recordings. The researcher then read through each transcript to obtain a feeling for the data, and to acquire a sense of the whole from the actual words used by the participants. Henning et al (2004: 104) describe this method as obtaining a global impression of the content, or tracking the pattern of objects in a setting. The goal of this analytical method is to understand phenomena from the perspective of those being studied.

Each transcription was then read through again, line by line, in order to identify significant material, and extract meaningful units, as suggested by relevance to the research aim; relevance to the literature review was also a guide.

Data were sifted by repeated reading through field notes, interviews and texts to identify items relevant to the research question. As transcribed texts are bulky, the technique of reduction in thematic analysis (Onwuegbuzie, Witcher, Collins et al, 2007: 125) was used.

According to this method, the qualitative researcher summarised, sorted and extracted information, in a systematic process of looking for frequency, omissions and declarations in the initial process of coding (Le Compte, 2000: 148). This resulted in a reduction in volume, which eased examination while maintaining the presence of its evidence. The process eventually led to the development of a labelling (marking) topical coding system, which occurred at different levels, as described next.

Level I coding requires that the researcher look for processes. Level I codes are called substantive codes, because they codify the substance of the data, and often use the very words used by the participants themselves (Streubert and Carpenter, 1995: 156). There are two kinds of substantive codes: open and selective.

In open coding, codes are made up with the purpose of labelling units of meaning, keeping in mind the research question and objectives; it is an inductive process that results in making meaning of the data and it is highly interpretive (Henning, van Rensburg and Smit, 2004: 105). This process was used in the first stage of constant comparative analysis to identify processes in the data (Streubert and Carpenter, 1995: 156). Data were broken down into incidents, and their similarities and differences were examined. Different colours were used to highlight similar passages of text. A particular descriptive code label was assigned to each colour code, to facilitate easy retrieval for horizontal comparison and analysis at a later stage (Gibbs and Taylor, 2005: 1).

To summarise, the initial coding process involved assembling a taxonomy of items and classifying these into information sub-groups (le Compte, 2000: 149), whose relevance emanated from the study proposal; this stage also involved a preliminary process of selection whereby the researcher made decisions on what to include. This process resulted in a list of identified non-repetitive, non-overlapping units (Onwuegbuzie, Witcher, Collins et al, 2007: 126), explicitly or implicitly relating to the subject matter of the study.

According to Munhall (2001: 228–229), by a comparison of similar incidents, the basic properties of a category or construct are defined; certain differences between incidents establish boundaries; relations among categories are clarified. Comparative analysis forces the researcher to expand or tease out the emerging category by searching for its structure, temporality, cause, context, dimensions, consequences and relation to other categories.

Data were coded, compared to other data, and assigned to clusters and categories according to obvious fit (Morse and Field, 2001: 132). Specific categories were chosen by questioning what each level I code might indicate and then comparing it to other level I codes. First, coded condensed responses were grouped together in a table of different taxonomies. The researcher then developed another table grouping responses according to descriptive patterns that appeared repeatedly in the data. This enabled the researcher to determine what particular level II category would be appropriate for the grouping of similar level I codes.

Level II codes are formed from selective or implicit codes, which are categorising, and also require the use of the constant comparative method. They are constructed by the researcher based on concepts which uncover characteristics or infer relationships in the treatment of the data (Mullen and Reynolds, 1978 in Streubert and Carpenter, 1995: 156).

Each category was then compared to every other category to ensure that they were mutually exclusive (Streubert and Carpenter, 1995: 157). Clusters of categories were organised from aggregates of mutually exclusive units; in this way the coding process was used to conceptualise data.

Eventually, categorisation yielded groups of categories (constructs) that encompassed smaller more concentrated categories. Thus major processes or clusters were revealed; these formed core variables that are broad in scope, interrelate concepts and hypotheses that emerge during data analysis.

This process of thematic analysis was used to identify and crystallise the data into a typology of major themes pertaining to the Child Health Nurses' experiences of managing malnourished children.

To summarise, a large number of codes were generated in this first stage of analysis where the researcher read through the entire text to get a global impression of the data, and then collapsed them into conceptual categories, in the manner stated in Henning, van Rensburg and Smit (2004: 10) and Gerrish and Lacey (2006: 198).

Four cognitive processes appear integral to all qualitative methods: comprehension, synthesising, theorising and re-contextualising. These cognitive processes occur more or less sequentially. The qualitative methods provide the epistemological basis for the research method, which dictates how the four processes are weighted, targeted, and sequenced in analysis. The nature of the research topic, the purpose of the research, the constraints derived from the research setting and the participants, and the disciplinary background of the researcher also have some bearing on the methods used. (Morse, 1994: 25 - 36).

Synthesising is the merging of several stories, experiences, or cases, to describe a typical, composite pattern of behaviour or response. The principal means of synthesising or merging is the process of thematic analysis. These analyses were conducted primarily by identifying common structures of the particular experience, and these provided an understanding of the study environment. The researcher had to reach a reasonable level of comprehension before being able to synthesise data.

A useful method was to identify beliefs and values in the data and to use lateral thinking by examining similar concepts in other settings or by seeking other complementary data sources in other contexts in the study. The first step was to ask questions of the data that would create links to established theory. If correct, such linkages greatly speed up the data analysis (Morse, 1994: 25–36).

Comprehension was reached when the researcher had enough data to be able to write a complete, detailed, coherent and rich description. As the processes of data collection facilitated comprehension, so did the processes of data analysis.

Chenitz and Swanson (1986), and Munhall (2001) mention the '6 C' family of theoretical codes that require the researcher to ask questions about the categories in the data, and thus enable them to organise and clarify categories, and to develop theoretical links between them. Theoretical codes included in the data are causes, consequences, conditions, contingencies and contexts.

To conclude, thematic content analysis concurrent with constant comparison was used to classify the words in a text into a few categories (themes) because of their theoretical importance, and to make inferences from text data. Data segments or units were extracted and organised into a system derived inductively from the actual data, then comparisons were made and used to build and refine the categories in the process of constant

comparison; use of some relevant aspects of the family of 6 Cs helped to conceptualise how categories related and integrated to each other (Chenitz and Swanson, 1986: 125; Munhall, 2001: 226; Henning, van Rensburg and Smit 2004: 127).

2.4 **TRUSTWORTHINESS**

2.4.1 **Introduction**

The term 'trustworthiness' is used in evaluation of the merit or quality of the findings of qualitative inquiry, which is determined using the criteria of credibility (tangible reality), transferability, dependability and confirmability. (Lincoln and Guba, 1985; Polit, Beck and Hungler, 2001: 312–314)

The model of trustworthiness based on that of Lincoln and Guba, 1985, was applied in this study. The model is based on identification of four aspects of trustworthiness: truth value, applicability, consistency and neutrality.

Within the conventional research paradigm, the criteria which have evolved to the questions regarding the aspects of reliability and validity are internal and external validity, reliability and objectivity (Lincoln and Guba, 1985: 290).

2.4.2 **Transferability**

Transferability, referred to as applicability in the conventional sense, is concerned with the extent to which the study sample is representative of the population to which generalisations will apply in conventional quantitative inquiry (internal validity); Krefting (1991: 216) states that it is the extent to which the findings can be applied to other contexts and settings. However, the establishment of transferability in the naturalistic paradigm is very different from the establishment of external validity in the conventional sense. The naturalist can only set out working hypotheses together with a description of the time and context in which they were found to hold. These can provide only the thick (dense) description necessary to enable someone interested in making a transfer to a similar context, to reach a conclusion of whether such a transfer is possible.

In this study, it was the researcher's responsibility to provide the data base to make such a transfer possible (Lincoln and Guba, 1985: 316). When collecting data, an effort was made to accumulate a diversity of experiences, so that the emerging categories are sufficiently grounded in the everyday experiences of the informants (Morse, 1997: 196).

In addition, the investigator ensured that sufficient contextual information about the fieldwork sites was provided, to enable a reader of the study to make such a transfer. The

researcher knew only the sending context, and was thus not able to make transferability inferences about the receiving context. Thick description of the phenomenon under investigation was provided, to enable readers to compare the instances of the situation described in the research report with those in other similar circumstances, in accordance with Shenton (2004: 69–70).

2.4.3 **Credibility and Confirmability**

According to Krefting (1991: 214), a major threat to the credibility and confirmability of qualitative data could be the extent of the researcher's qualitative research experience, background knowledge, perceptions of the setting, and the relationships between the researcher and the study participants. Being an experienced Child Health Nurse working within the setting, the researcher employed measures such as reflexive analysis to ensure truth value in the data, and to prevent extreme over-involvement from occurring (Shenton, 2004: 66–67). The researcher kept a journal to record daily schedules, logistics and a methods log of the study, as well as reflections on the generated thoughts, feelings, ideas and hypotheses from contact with study participants (Krefting, 1991: 218). Documenting personal feelings and thoughts helped the researcher to be aware of the threat of bias and preconceived thoughts or assumptions.

The researcher thus used reflexive commentary (Shenton, 2004: 68) to record the initial impressions of each data collection session. As patterns emerged from the raw data, further classes of records, such as data reduction and analysis products, process notes, data reconstruction and synthesis were also included in the commentary (Lincoln and Guba, 1985: 319). Maintaining rapport with participants, giving them freedom – the right to refuse to participate in the study, and the right to withdraw from the study at any point – helped assure them of privacy and confidentiality. Probing and iterative questioning (rephrasing previous questions) were successfully used to elicit detailed data. Confirmability can be achieved when truth value and applicability are established (Krefting, 1991: 217).

Credibility and confirmability were enhanced by continuous member checking of data sources; accuracy of the data was checked with participants on the spot and at the end of the data collection dialogues, where each participant was given a chance to read a copy of her interview transcript to ensure its veracity.

Further measures to enhance credibility and confirmability were also achieved by the use of the method of triangulation of multiple data sources. Field notes, interview scripts, process and personal notes were therefore gone over with the supervisor and triangulated against

one another to enhance understanding of each phenomenon (Lincoln and Guba, 1985: 304).

2.4.4 **Dependability**

Dependability refers to the criterion of *consistency* in the qualitative approach. According to Krefting (1991: 217), this would be referred to as the criterion of reliability in the quantitative approach, which relates to whether the findings (stability and equivalence of the data) would be consistent if the inquiry were replicated by different people with the same subjects in a similar context. Inherent to this context of reliability are the restrictive methods and tight design in the quantitative approach, which are not applicable in the qualitative setting where control is relatively absent. Qualitative research emphasises the uniqueness of the human experience, such that variation in experience is sought, rather than identical repetition. Thus, variability is expected in qualitative research, and reliability is defined in terms of dependability (Krefting, 1990: 216).

2.4.5 **Measures to Ensure Dependability**

The exact processes within the study should be reported in detail to ensure dependability; that is, methods of data gathering, analysis and interpretation must be carefully described; such dense description of methods provides information as to how repeatable the study might be, if not to get the same results (Krefting, 1991: 221; Shenton, 2004: 71).

2.4.5.1 **The audit trail**

The inquiry audit consists of a residue of records stemming from the inquiry, which look at the process and the product (records) of the data collection and analysis. Lincoln and Guba (1985: 320) suggest certain audit trail categories which consist of the raw data, its reduction and analysis products, as well as the reconstruction and synthesis products. Process notes and instrument development information complete the record residue.

2.4.5.2 **The audit process**

This is an algorithm that comprises a series of tasks between the auditor and the auditee, with guiding questions to help the auditor to reach a conclusion. It also provides cross-references for the audit trail categories that must be consulted at each point. In a real situation, some of the questions may be interchanged and others omitted entirely (Lincoln and Guba, 1985: 320). Elements of the algorithm include pre-entry, determination of auditability and trustworthiness, the formal agreement and then closure of the process.

2.5 ETHICAL CONSIDERATIONS

2.5.1 Institutional Review and Approval

Institutional review represents the conscience of the institution, and is concerned with human rights and human dignity. The principles of (patient) autonomy, rights to privacy, self-determination and safety are critical components of the philosophical statements of review boards (Morse, 1989: 259). Documented approval and clearance was therefore obtained from the relevant authorities as stated below; copies are included in the report.

Letters of approval to conduct the study were obtained from the Health Human Research Ethics (Medical) and Post Graduate Committees of the Health Sciences Faculty of the Witwatersrand University (Annexure B) as well as the Provincial Health Department's Research Committee. Permission was also sought from the City of Johannesburg (Annexure D).

2.5.2 Privacy, Confidentiality and Anonymity

The risks and potential harm of identification of informants are complex and differ depending on who or what is being studied (Morse, 1997: 311). The principle of informed consent is important in any type of human research (Morse, 1994: 343).

Researchers want to conduct interviews with sensitivity and judgment; participants enter a study after signing an informed consent statement that describes the research study including the topic of the interview and the risks and benefits (Morse, 1994: 311).

After initially obtaining consent from participants verbally, informed consent was obtained in writing, both to conduct in-depth interviews and to audio-tape them (Annexures H and I).

Participants could choose a pseudonym to protect their right to privacy. Taped interviews and transcripts were accessible to the researcher and supervisor only, and were kept under secure lock and key. Participants were informed of their right to withdraw from the study at any time without penalty in any form if they so chose.

2.6 CONCLUSION

This chapter discussed the research design, data collection and analysis process, as well as ethical considerations. An attempt was made to integrate the theoretical basis of the methodology with the study's significance, research question, aim and objectives.

CHAPTER 3

DISCUSSION OF STUDY FINDINGS AND LITERATURE CONTROL

3.1 INTRODUCTION

The previous chapter dealt with the method used to collect data and the applied data analysis approach. In this section, an interpretation of the findings generated from the study is presented and discussed. A quantitative approach was used to analyse the characteristics of the study participants, while a qualitative strategy was employed for data generated from interviews with the participants.

3.2 PRESENTATION OF FINDINGS AND LITERATURE CONTROL

Three themes, seven categories and nine sub-categories were identified from thematic content analysis. The initial stage involved reading through the transcripts to obtain a global impression of the content of the data. Open coding was then used to identify level 1 codes. Reduction of open codes in vertical analysis, then horizontal comparison moved the process to a higher level of abstraction. This resulted in identification of emerging categories and sub-categories, which were then collapsed further to form the major themes. Identified emergent themes were finalised with the concurrence of the study supervisor and a co-coder, following submission of the transcripts and field notes to them.

3.2.1 Participant Demographics

Six Child Health Nurses from the region were interviewed. The respondents were all female in the age range of 40–56 on average; experience in the Child Health service ranged from a minimum of 5 years to a maximum of more than 15 years; five respondents had a B. Curationis degree while one was still studying towards it; all respondents had a Community Health post-basic qualification. Participant demographics are summarised in Table 3.1.

Table 3.1: Participant demographics

Demographic Characteristic	Frequency	Percentage
Age Group		
35–45	2	33%
45–55	0	0%
>55	4	67%
Sex		
Male	0	0%
Female	6	100%
Work Experience (years)		
5–10	2	33%
11–15	0	0%
>15	4	67%
Post Basic Qualifications		
BA Cur (Ad & Ed)	5	83%
None	1	17%
Additional Certificate Courses		
IMCI, TB, FP, Drug dispensing	6	100%

3.2.2 Themes and Categories Identified

The following section is a discussion on the study findings and the accompanying relevant literature control. The literature control was conducted for the purpose of re-contextualising, and also serves to show how the current findings fit into what is already known (Jackson and Verberg, 2007: 8).

The section will include related information and findings from other studies to compare, confirm or, in some cases, contrast with the findings of the study. Various relevant literature sources will be referred to, including local and international journals, research reports and books. Presentation of the themes and categories follows in Table 3.2. The participants' unedited responses are quoted to support the study findings.

Three themes were identified, the first being factors affecting the delivery of the service, the second dealing with the emotional consequences experienced by those concerned, while the third concerned participants' recommended suggestions to improve the service.

Table 3.2: Themes and categories identified

Theme	Category	Sub-category
1. Factors affecting delivery of the service	1.1 Organisational	1.1.1 Communication: Counselling and support Recording and reporting Referral system
		1.1.2 Nutrition supplement Supplies
		1.1.3 Human resources
		1.1.4 Training
	1.2 Parental issues	1.2.1 Default
		1.2.2 Psycho-Social
		1.2.3 Sub optimal feeding practice
2. Emotional consequences	2.1 Parental aspects	2.1.1 Response to diagnosis of child
	2.2 Nursing aspects	2.2.1 Stress, frustration
3. Suggestions for improvement of the service	3.1 Organisational	3.1.1 Communication
		3.1.2 Human resources
		3.1.3 Training
	3.2 Parent	Not applicable
	3.3 Nurse	Not applicable

3.2.2.1 Theme 1: Factors affecting delivery of the service

The first theme concerns factors that have an influence on the quality of the service. The WHO states that GMP has been implemented in a variety of contexts as an element of nutrition and health programs. It has been promoted since the 1980s as a key component of critical preventive care for young children (UNICEF, 2007: 3). According to Swart, Sanders and McLachlan (2008: 129) analyses of selected interventions suggest that implementation is sub-optimal. In this study, various factors influencing the GMP service emerged from discussions with participants. Issues identified relate to challenges within the service.

3.2.2.1.1 Category 1: Organisational factors

The first category identified relates to aspects of the organisational entity known as the GMP service, as seen from the perspective of the study participants. The category related mainly to the conditions under which the service was offered, particularly problems with the material and human resources required for the implementation of the service. The category concerns issues of communication, nutritional supplements and issues related to staffing and training.

Sub-Category 1: Communication

The first sub-category identified concerns what could be called the cornerstone of the GMP service, which is a communication network between role players and its target groups.

Of particular importance are the following aspects: counselling and support, recording and reporting of information in relevant records and statistical data elements; the third element pertains to communication within the referral system.

Counselling and support for parents/caregivers

The WHO defines GMP as a nutrition intervention that not only measures and charts the weight of children, but uses this information on physical growth to counsel parents in order to motivate actions that improve growth; communication with caretakers on the basis of the growth curve is always considered a key element (Roberfroid, Kolsteren, Hoerée et al, 2005: 1122).

Counselling is a process of consultation and discussion with parents/caregivers. It may also involve advice and guidance where needed, and support of good caring practice. In accordance with IMCI principles, counselling adopts listening, learning and confidence building skills to equip the mother to care for her child. Information exchange forms the foundation of the management strategies for those children that are found to have a problem with normal expected growth.

An activity of prime importance brought up in discussions with participants, was that of *investigation into causes of, or potential risks for the poor growth*; thus interviewing of the parent to obtain a full history and family background formed an integral part of consultation. Health, financial, social and cultural aspects are included in the history in order to enable a relevant appropriate plan of action for management for the child. Moreover, if no risk factors are discovered, and the child is growing well, anticipatory guidance is given to maintain the satisfactory growth of the child; as explained by an informant:

“What we do – we weigh them, find the social history, then the health history – it’s the weighing, it’s the feeding for the child, for the family; we have to find out how many there are in the family, so if there’s a problem, we can help.”

Respondents expressed the sentiment that, certain basic communication principles were applicable for achieving the success in the service such as to create a *climate of ease*, so that *rapport* is established and information flows freely; two respondents portrayed it thus:

“The GMP service enables identification of the malnourished child, and provides an opportunity for discussion with the parents.”

Another participant, on the issue of the surrounding environment:

“The space should be nice; a conducive environment is a requirement.”

Another important point mentioned by a participant was that of language, as being important in creating a climate of ease that could facilitate understanding and promote a beneficial discussion with the parent:

“It becomes much easier if you understand each other language-wise, so if you are sitting together calmly, it makes her comfortable.”

Interpersonal skills were mentioned as being important to facilitate good communication, particularly counselling and support.

“The manner of approach towards caregivers is important.”

They were seen as a means to encourage cooperation between the concerned parties; in this way, the consultation is made more productive. Another participant elaborated:

“As a health professional, you try to encourage them to talk; we do a lot of health talk; if you show this person by education, by people who are able to get the message across, and give them an opportunity to ask questions, and enable discussion.”

Inclusion of the parent in the management plan was also mentioned as important by the respondents so that communication could become a two-way process of information sharing. It has previously been demonstrated that mothers generally view themselves as partners with a role to play when they are engaged in the process of GMP with health workers. The situation then allows them to take

ownership of their children's health and the GMP programme (Charlton, Kawana and Hendricks, 2009: 1044).

Another important aspect raised by informants in this study was that instilling understanding in parents around issues of prevention and management of nutrition-related ill-health was desirable, as it could go a long way in terms of facilitating prevention of nutritional disorders; as two informants clarified:

"A lot of health talk is done to explain why/how the child could develop malnutrition, and special emphasis is on prevention thereof; if there was effective health education to the community... it would be easier to succeed; effective health education assists with early detection and prevention... so understanding plays a very important part; as nurses we need to be talking the same language."

The second participant emphasised the point about the timing of the introduction of solids:

"We advise the parents to buy milk whenever [necessary]; what to give; the diet; what foods to give – solids when the child is above six months, below six months it's only milk."

Use of the Road to Health Card or Booklet (RtHC/B) was identified by respondents as a most important tool to facilitate communication in relation to counselling and support. The growth curve is helpful for interpretation of the direction of the child's weight curve (and therefore growth) on the growth chart. Recording of the weight can be used to demonstrate the well-being of the child to the mother, helping to reinforce information discussed in the counselling session.

A respondent illustrated:

"You educate the mother: 'You see, your baby is growing well, and the weight is plotted on this line.'"

Another participant clarified:

"It's a two-way thing now; whoever sees her, she will say, 'Sister, the child's weight has gone down, what is happening?'"

To solidify this sentiment, it is averred that the counselling should also consider the complexity of human health behaviour and actively involve the parents and where possible, the community at large. Roberfroid, Kolsteren, Hoérée et al (2005: 1129), conducted a systematic literature review of an aspect of the programme theory of GMP, focusing on ‘maternal comprehension’ of weight graphs; they found that mothers could interpret their child’s growth as ‘good/normal’ or ‘not good/abnormal’; their conclusion was that parents are able to evaluate their children’s growth, and would like to share their experience with health workers.

However, the Road to Health Card did not seem to be used on all occasions, as another respondent mentioned:

“The growth chart enables the mother to visualise the growth of the child, and this promotes understanding about how to monitor their child’s growth; to reach their minds, I sometimes demonstrate to them using the baby’s card, if the baby’s growth is going according to the age or not.”

Inclusion of related health issues in the counselling of parents, such as prevention or early management of common illnesses, like diarrhoea and vomiting, respiratory tract infections, TB and/or HIV, would feature positively in preventing nutrition related ill-health; in support of these sentiments, the respondents stated:

“If the weight is against the age, you find that there is... illness that the child is undergoing, which is not yet exposed; I had a baby with the weight at 3 kg at three months...and the TB test was positive; now on treatment, she is showing a positive weight gain.”

Another participant described how, by counselling the mother about the advantages of timely management of some common illnesses (based on IMCI principles), complications could be avoided. She explained:

“And then another thing would be to educate the mother on home remedies, to tell them the danger signs... the child is managed promptly, the duration of the illness is shortened; and also HIV – obviously a child who is positive and not taken care of will become malnourished – and test for TB; that can save us from having malnourished children.”

In conclusion, sharing information between health personnel and parents is important, both to individuals and to larger groups. Respondents felt that it was necessary for communication to be a two-way process that happens in a conducive environment, where the parents could contribute and be able to ask questions; they also asserted that attempts are always made to place special emphasis on prevention and strategies for the early detection of growth faltering.

Recording and reporting

Recording of information accurately on the Road to Health Card (RtHC) or Road to Health Booklet (in recent times), and the facility-held child health record card, is stated in the policy guidelines to be a means to promote the relationship between health workers and parents/caregivers. The aim of the RtHC is to have an accurate home-based record of a child's health and development. Furthermore, it also serves as a means of communication among various members of the health team, and can improve the identification of children needing extra care (CoJ, 2005: 4).

Participants also felt that recording weight on the RtHC was beneficial, though a concern was raised that mistakes could be made; they expressed it this way:

“Plotting should be done the right way, and comments should be written, because if you didn’t plot correctly on one occasion... the next weight will be misinterpreted, so you can’t tell what the right weight is; you communicate well if now he’s picking up weight... and are able to see.”

A second participant corroborated:

“We plot the weight on the Road to Health Card, and it is then you can determine if the child is underweight, then you classify them.”

A study by Schoeman, Hendricks, Hattingh et al (2006: 1009) reported failure to plot (or incorrect plotting of) the weight on the growth curves (z-score lines) in the RtHC, as well as failure to record other vital information, such as the birth weight, date of birth, information on child feeding, nutrition-related information, and poor use of the medical record card related to the Pre School Card. These authors found that dates of birth were not recorded in 50% of entries; calendars were not completed in 80%, while the weights of 55% of the children in the study were not plotted.

A participant observed:

“Sometimes people come with cards [that are] charted wrongly – plotting of the weight is wrong.”

Similar concerns regarding use of the RTtC was raised in an article, that responses from ministries of health in 178 countries have identified numerous conceptual problems associated with GMP, including poor plotting of anthropometric data (40%), and poor understanding of growth reference curves by health workers (Roberfroid, Kolsteren, Hoerée et al, 2005: 1128; Charlton, Kawana and Hendricks, 2009: 1036).

Another form of recording done relates to the Health Information forms (Daily Headcount Register, Malnutrition Monitoring Register and the Severely Under-nourished Report). The two latter forms serve to keep a register of the identified child to monitor progress following identification, and to report on progress until the outcome of intervention.

Each CHN is expected, in accordance with the Nutrition Supplementation Guidelines of the DoH (DoH, 2012: 11), to register and submit a report of children identified as underweight for age (mostly with weight falling below the second or third z-score line on the weight chart, or those failing to gain weight on two subsequent visits, or those whose weight is declining). Particular information of the child is entered, including the name, address, date of birth and birth weight. Subsequent weights are entered for comparison at each clinic visit. The register can be used to check if the child comes for subsequent visits.

Reports on all under-nourished children are submitted on a regular (monthly) basis as part of monitoring and evaluation of the service. Information in the reports is on specific data elements pertaining to identification of under-nourished children identified, and the outcomes of their management. The reporting pathway is from each clinic to the regional health managers, then to the central office where a citywide report is compiled; collated reports are sent via the Provincial Sub-directorate Nutrition to the National Office on a quarterly basis.

In general, the recording of data or information on the malnutrition register was seen as useful; indeed, two respondents saw it as manageable and user-friendly, though time-consuming, as there were quite a number of forms used for different purposes.

“I’ll say it’s helpful, it’s continuity of care, it enables you to continue to manage the child until discharge, so I think the surveillance [form] is user friendly; it’s easily manageable.”

An additional time requirement is concerned with reporting the results of following up, as oftentimes the child being followed up is not found at home and clinic attendance on given return dates is irregular. Acknowledgement of the time-consuming tasks in a busy PHC in general was affirmed in a study by Iversen, Hoisaether, Morseth et al (2011: 929, 930) as they stated that extra time was needed for growth promotion, monitoring and evaluation.

As one participant clarified:

“We depend on the parents to come to the clinic, if they don’t come, we don’t know what to do, they’ve given the wrong address when you visit, those are the difficulties that we have.”

Another emphasised:

“Those are the children who go missing, and you can’t update their follow-up.”

Another feature of the service that seems to present a challenge is the reports submitted to the Health Information System. A number of participants expressed concerns and doubts regarding the reliability of the reports sent to regional offices. Concerns revolved around missed (unregistered) children, pressure for submission of follow-up reports and updating of such reports; as one respondent explained:

“You have to report every month [laughter] – every month! That’s why so many children are missed; they don’t put them here [in the stats] because they are going to follow you up.”

Difficulties cited by respondents pertained to pressure for time; for instance, sometimes when the clinic is very busy, there is not sufficient time to register an identified child due to the rush to see all the children in the queue. By the time the nurse has completed the consultation, she might forget to register the identified child; participants elaborated:

“We get reports (at our regular task team meetings) that people are not reporting at all, or under- or over-reporting, so it’s not reliable really; because you don’t want to be asked ‘did you follow up that child’ next month [...] it’s not reliable, haai it’s poor, that’s what I think.”

In a study assessing the effectiveness of growth monitoring and promotion, it was found that inadequate clinic records, lack of telephone access, inaccurate addresses, the transient nature of the residential arrangements of the population, and the difficulty of following up on children who had not returned to the clinic, presented difficulties in the GMP service (Charlton, Kawana and Hendricks, 2009: 1043).

As respondents elaborated:

“The movement of the people, migration, some people are moving around from one place to another – those are the children who go missing; you can’t update their follow-up.”

“It does have challenges, you know; the point is migration, when she moves, she doesn’t tell you.”

Monitoring and evaluation of the implementation of the service is important to provide Regional Health and Programme Managers with information regarding the implementation of the programme, achievements and areas that require adjustments. Child Health and Supplementary Feeding Scheme data elements are utilised to monitor aspects of the programme (CoJ, 2005: 5).

Notably, in a section highlighting the importance of data-based decision making at national level, it is stated that effective management of nutrition actions requires monitoring and assessment of both process and results, including regular monitoring that produces timely information useful in programme decision making; for that programme leaders need trustworthy reports on coverage and nutritional effects for nutrition actions (Bryce, Coutinho, Darnton-Hill et al, 2008: 521).

Historically, studies have portrayed discrepancies with the detection and registration of undernourished children; one study found that nurses identified correctly only half of children with moderate wasting (Hamer, Kvatun, Jefferies et al, 2004: 182); in another study (Schoeman, Hendricks, Hattingh et al, 2006: 1010) the researchers

and nurses identified under-weight and growth faltering in 50% and 10% respectively, while only 4 of 11 children with growth faltering were recorded in the Mandatory Malnutrition Register (Iversen, Hoisaether, Morseth et al, 2011: 928).

Respondents reported a concern about lack of feedback from further structures of the reporting pathway, other than from the regional HIS office. It would appear that there is a disjuncture between the managers, who need to submit trustworthy reports timeously, and PHC staff, heavily influenced by time pressure and no possibility of knowing whether the effort is worthwhile. They receive no information on whether the effort expended on the service has a mitigating effect on the problem. Participants portrayed their sentiments as follows:

“I know it [the report] goes to the clinic manager; she submits it to the coordinator, who sends it to the department I suppose, but from there I have never had a memo or something; is it going up, or coming down; whether they do read our stats or not, I don’t know.”

Another participant clarified:

“Yes we do report, we report every month; we send out, we do have the graphs from the HIS, so the factor that affects it maybe I could say the feedback;... I’ve never had feedback from the Department of Health, whether they read our stats or not, or analyse them.”

While a third complained:

“We send it [the report], we don’t know what happens to it, what they do with it.”

In a study of the management of infant developmental needs in primary health care clinics in South Africa, it was found that community health nurses felt that they did not get the necessary feedback about their performance from management. A major theme identified in that study was lack of support from management; health care governance was absent, with inadequate commitment to and support for nurses (Leech, van Wyk and Uys, 2007: 96); this is affirmed by Mazibuko (2006: 54–55) who states that support is crucial for the implementation of any programme, and health care providers need recognition of their professional worth and the adverse circumstances under which many of them work.

To summarise, the recording system and the reporting of stats has beneficial elements in terms of keeping the user up to date with current information. However, the information system appeared to be riddled with challenges, which affected the reliability of the information submitted. These ranged from failure to register identified malnourished children, to difficulties with follow-up of their progress. Time constraints were a major factor cited. Also discouraging to those who report, was the lack of feedback on the information they took time to send.

The pressure for time as cited by respondents appeared to play a part in the constraints on adequate recording and reporting. According to Carayon and Gurses (2008: 6) high workload and time pressures may lead to deviations from those practices deemed necessary to maintain operations, resulting in violations or 'work-arounds'.

The referral system

Children at risk of or who already have growth faltering often have other underlying associated health or social problems which require referral to other agencies for assistance, mainly social services, hospital or NGOs. All severely malnourished children in particular have to be referred to hospital.

For the most part, the referral system appeared to function well, with some respondents expressing satisfaction with the results of the referral; however, other respondents reported difficulties with certain aspects of the system, such as for example lack of identity documents.

Participants expressed it thus:

"Another child that was under-nourished, it was due to [a] cardiac problem, so the child was referred to Bara [Baragwanath Hospital] where the cardiac problem was diagnosed, so he is going to under-go an operation, so he might improve his weight."

"We refer to Bana Pele, if it [the age] is after six months; Bana Pele is a program [offered by the Gauteng Provincial Government through social services] which ensures children are growing well, ... that every day the child has something to eat, because if a child is hungry, s/he won't concentrate at school."

However, lack of feedback from the referral agencies was cited as a challenge; as participants illustrated:

“When you send them to the hospital, they don’t give you a report back; you refer them for medical opinion, you don’t get a report back.”

“You refer them to Bana Pele on the on the referral form, and yet don’t get any feedback.”

Challenges and constraints regarding the referral system were cited in the Human Science Research Council case study on social exclusion. Challenges listed were that of implementation, lack of capacity, and insufficient resources (Rispel, Molomo and Dumela, 2008: 37). It is also mentioned in their report that hospitals have not been well integrated into the referral system (Swart, Sanders & McLachlan, 2008: 9).

Bryce, Coutinho, Darnton-Hill et al (2008: 512) state that growth monitoring, unless linked to an effective referral system, was found to be ineffective in reducing child under-nutrition; an effective referral system is also mentioned as one of the main components of IMCI that could result in improvement in the child health service (Hendricks, Goeiman and Dhansay, 2007: 254).

Referral to social welfare services posed another challenge. The main concern related to the ability of the nurse to obtain assistance for the child, and thereby resolve the underlying cause of the nutritional problem if this was the case; this intention was hindered by limited access to social services. A respondent observed:

“We refer them to the social worker, but the problem is, we don’t have social workers here, in this area; we send them to the provincial community centre, but they don’t find the social worker, as she is not available daily.”

In conclusion, the referral system appeared to have some challenges, though it could benefit children with adequate operation.

Sub-Category 2: Nutritional supplements

The Supplementary Feeding Scheme is part of the Nutrition Supplement Programme (NSP). The NSP has been incorporated into the Integrated Nutrition Programme. It aims to correct under-nutrition by providing nutrition supplement

products such as breast-milk substitutes, cereals and energy drinks, as well as nutrition education and counselling (Iversen, Hoisaether, Morseth et al, 2011: 923).

Target groups identified for the GMP service are infants and young children less than 60 months of age and their caregivers (CoJ, 2005: 2). The Supplementary Feeding Scheme Policy document states that local authorities and health care institutions (clinics and hospitals), Regional Nutrition Units, the Provincial Sub-directorates of Nutrition, primary health care personnel and NGOs are included amongst role players (DoH, 2005: 3).

Nutritional supplements for children found to be under-nourished were constantly reported to be a cause for concern for most participants. The main difficulty was related to the reliability of the supply, as the majority of respondents elaborated:

“If the milk supply has not yet arrived due to transport or whatever, the parent is looking at the service provider.”

“The challenge is the milk supplement, that we don’t have most of the time.”

“We do offer milk supplement, but there are budget constraints.”

“We are facing a problem with the milk formula now, we are giving them less and it contributes to the malnutrition now; we’re promoting this malnutrition that we are trying to avoid.”

“Sometimes you get food supplement, sometimes it’s not there, there’s no consistency.”

Other studies have mentioned the issue of the nutritional supplements; Iversen et al (2011: 924) stated that given the lack of improvement in the last decade in several growth indicators among disadvantaged South African children, the PHC service may still face large challenges with the vitamin A and nutrition supplementation programme; Charlton, Kawana and Hendricks (2009: 1043), in their Western Cape study on opinions on supplementation programmes among health workers and parents, found that PHC staff reported shortages in supplies.

Sub-Category 3: Human resource issues

Each clinic in the region has a staff complement made up of 1 nurse for each department, such as EPI, TB, FP, and so on. The only service that might have 2 nurses at a time could be PHC in very busy clinics, one for curative, and another for chronic care. In all the clinics, child health is done by 1 EPI nurse who also sees sick children under five under the IMCI part of the service.

Participants were concerned about workload and the fact that they are responsible for conducting the child health clinic (well baby clinic) with EPI, GMP but also including PMTCT and IMCI (for sick children) single-handedly on a daily basis, regardless of the size of the clinic; as they clarified:

“Challenges that affect the service, number one, shortage of staff, because sometimes you see, there are days when you see up to 80 babies in one day, because you do this well-baby clinic alone, and now they have introduced the IMCI, and PMTCT.”

Another participant corroborated:

“Presently I’m the only nurse doing EPI and growth monitoring, and sometimes it becomes a bit of a problem because there’s work overload, if we could be given more staff, I think it would be better.”

A participant mentioned that she could sometimes get relief when students were present for practicals; she commented:

“I’m being helped by the students if they’re here, but if there are no students, who will help me? How many nurses are here? Four! One for TB, PHC, there’s also ANC and FP.”

An additional concern was regarding skills; the participant explained:

“Shortage of staff is a challenge, and shortage of skilled staff because if every nurse was trained on IMCI, because it covers a whole lot of things, children would be properly seen, you would be able to see which one is at risk, you’d know which steps to take before the child complicates or anything like that; if government was to employ more people that would help because it’s only one person and overload of

children because now you are trying to push the queue instead of giving the quality [of care].”

In a study on constraints facing IMCI trained health workers, it was found that the package of services that forms the child health service was seen as useful, though it is time- and labour-intensive. The author states that success in the health service is integrally tied to human resource capabilities (Mazibuko, 2006: 50); she also asserts that the respondents in her study felt that staff shortages should be addressed as a matter of urgency; indeed, the conclusion reached is that an important background to the weakness of many health programmes, including IMCI, lay in overall deficiencies in human resources (Mazibuko, 2006: 58). It is noteworthy that staff performance, heavily influenced by the time available for each patient, was shown to correlate with patient satisfaction (Iversen, Hoisaether, Morseth et al, 2011: 930). Carayon and Gurses (2008: 3) assert that a heavy workload seems to be related to sub-optimal patient care.

The challenge of time constraints is mentioned in a study on the performance criteria of GMP programs, wherein it is stated that the monthly weighing of around 4% of the total child population in developing countries (children under 2 years of age) necessitates important staff time resources. The authors further state that, if resources are scarce, this constitutes an important opportunity cost, possibly compromising the follow-up management of the detected cases especially if the caseload is high (Roberfroid, Kolsteren, Hoerée et al, 2005: 1125).

Concerns about overburdening health workers and difficulty in planning in the face of increased logistical requirements were also raised by Wallace, Ryman and Dietz (2012: 6) in their study on integration of maternal and child health services with immunisation program. These authors found that program managers reported that the length of time needed to deliver the package impeded the overall implementation of the service. However, they suggested that using immunisation programmes as a mechanism for providing additional services could be successful provided that additional health workers were available. Challenges cited included integrating complex time-intensive interventions, logistical difficulties, and concern for harming existing services.

Notably, the human resource crisis of health personnel has been argued as a cause of low immunisation coverage (Igarashi, Sasaki, Fujino et al, 2010: 581). Wallace, Ryman and Dietz (2012: 6) suggest that a useful pre-integration activity may be to

identify the key challenges already facing the system and to incorporate strategies to address them rather than only focus on the integration.

An additional concern raised by participants was the issue of continuity of care. They felt that it was affected by the absence of the health worker for whatever reason, and had an adverse effect on the service; two participants stated:

“You find that sometimes you are not on duty because you have to go on in-service [training], or you are relieving the other nurse in some other service, and another nurse is seeing the patient, and they don’t know the patient, so the service is not continuous, there is no continuity because you are changed.”

Another participant emphasised:

“When you are not around, there is no continuity; we simply cannot manage.”

Assessment of behaviour change after counselling emerged as yet another issue raising concern; the point mainly related to opportunity to assess how and if indeed behaviour changed.

Opportunity for follow-up and support at home was reported to be affected by time constraints. Home visits also offer a chance for investigation into home circumstances, socio-economic status and caring status involved in the child’s failure to grow; participants elaborated thus:

“The service is very difficult, being mostly theory, as there is advice given at the clinic, we can’t know what happens once the mother is at home; we do home visits once that day, but we don’t really know; we see the child here at the clinic most of the time.”

Another participant highlighted the benefit of being able to do a more detailed assessment; she added:

“If you could go [to do the home visit] yourself, you could see a broader aspect, to make a comprehensive assessment, so unfortunately it is not possible to do everything ourselves.”

In summary, various human resource-related issues were seen to have an influence on the service, stemming from shortage of staff with concomitant time constraint and workload related issues. Other related issues were reported to be lack of continuity in the service if the Child Health Nurse was away for any reason, and limited ability to do follow-up at home, where further support and assessment of the counselling given at the clinic could take place.

Sub-Category 4: Training

Training was seen as necessary to maintain goods standards in the service and could serve as a means to impart information on new developments that come up. It was also felt that in-service training should be ongoing, intensive and frequent in order to capacitate those involved in the service. According to participants:

“In-service training, if there are changes, every time there is a different way of doing things, just to tell us, to help the service, and to keep up the standard; training is a most important thing, but needs money and other things, so it is always an issue, but it is important.”

Another participant clarified:

“We professional nurses, you come and work in EPI, they send you for training specifically for this, so you must know, they empower you, so that even if you miss some things, the information they give enables you to run with the department.”

In addition, it was also felt that training content should be based on common principles so that information given by health workers could be based on common principles; a correspondent declared:

“Training? Health workers should all have the same understanding, use the same language to preach the gospel of nutrition so that people can be knowledgeable.”

This is in line with a finding that the majority of primary health clinic staff who participated in a study, felt that training was helpful (Iversen, Hoisaether, Morseth et al, 2011: 928); training can provide tools for health professional to empower and inform mothers and caregivers (Bourne, Hendricks, Marais et al, 2007: 237).

A related issue raised by a participant was that the basic training curriculum was limited under the integrated four-year nursing course, as previously, community health nursing was a full post-basic one year course. She articulated:

“More training should be done because most of us were trained when we were doing community health nursing, now lately, there is no community; we did the community course for a year; the new nurses, the new curriculum, they do it for a few months, so now there is a difference between the now [present/current] nurse and the previous nurse regarding growth monitoring.”

In general there was affirmation of this concern on nursing training; a sentiment was expressed that a decreasing number of nurses are being trained in the country and that there is an urgent need to expand the training of nurses, perhaps by making it a national prerogative (Daviaud and Chopra, 2008: 49).

To conclude, a training plan and timetable for the implementing of nutrition counselling in the Scheme should be discussed and developed by each Regional Nutrition Unit. The training plan should be developed for clinic personnel to assure an understanding of the holistic approach to health to prevent malnutrition. This is an important statement for the GMP as it has been found in some studies that numerous conceptual problems have been identified with GMP, including poor understanding and interpretation of the growth reference curve, and inaccurate plotting of anthropometric data on the growth curves (Roberfoid, Kolsteren, Hoérée et al, 2005: 1128; Charlton, Kawana and Hendricks, 2009: 1036; Iversen, Hoisaether, Morseth, 2011: 929).

3.2.2.1.2 **Category 2: Parental issues**

The relationship between socio-cultural and psychological factors, and their combined effect on child nutritional status, has been well documented in the literature. Surkan, Kennedy, and Hurley (2011: 612) state that the nutritional status of children is likely to be influenced by several factors such as food security, the health environment, availability of health care and feeding and caring practices. Several issues relating to parents, and the effect they had on the health of the child, came up in the discussions, as outlined below.

Default, poor compliance

Migration, mobility and resulting default was another issue raising concern in that parents who were constantly on the move with no fixed abode could not be found

when followed up. In some cases a wrong address had been given. As respondents stated:

“The movement of people, people are moving around, migration; you find the person has moved to another place, and others are foreigners who have come to our country, [and] don’t have permanent settlement.”

A participant added, on the issue of poor clinic attendance when immunisations are completed:

“They don’t come [for return visits]; when you do a follow-up, they tell you no, I’m working, this and that; that is the challenge we’re facing, even though we are not sure whether she’s working or not, they will tell you that no, because I’m working, I can’t afford to bring the child every month when the child is not getting injections or vitamins; just bringing the child for weight, it’s a waste of time.”

Psychosocial issues

Socio-economic issues were also recognised as not only playing a role in the child’s poor health, but also affect the service; participants observed:

“The cause of the malnutrition, sometimes It’s because of socio-economic problems or whatever, the number of people in the family, and so on.”

“We find that there are so many in the family, so many who are unemployed.”

Another concern was access to the child care grant:

“You find that the mother has no ID, so she can’t get a grant.”

Teenage mothers also came up in the discussions, as contributing to the issue of children being left under the care of grandparents, generally not accepting responsibility for their children and failing to take the initiative to care for the child.

“The mother leaves the child with the grandparents, and they go wherever, sometimes they take the card so that they withdraw the [grant] money and abandon the child with the grandparents; they want to go and party and leave the children with the grandparents, who are old and cannot take care of the child.”

“The mothers, they just try to push the responsibility to someone else.”

“We’ve got young mothers, young mothers who still talk of about their mothers, like ‘my mother said this, my granny said that’; they just try to push the responsibility to somebody else; they are young in such a way that when they get these babies, they still feel they are not responsible for these children; young mothers who are not yet mature to take care of their babies.”

While another emphasised:

“Teenagers bring children into the world, but they don’t take responsibility.”

Iversen, Hoisaether, Morseth et al (2011: 923), have observed that nutritional status has remained inadequate among disadvantaged mothers and small children in South Africa. On the other hand, Charlton, Kawana and Hendricks (2009: 1043) state that underlying factors that are important determinants of childhood under-nutrition include low household income, poor living conditions and a low educational level of the primary caregiver. This sentiment is solidified by the statement that the multiple risk model has evidence to show covariance between nutritional deficiencies and other contextual and behavioural life stressors, which result in impairments in mother-child interactions (Wachs, 2009: 935s).

Parents of foreign extraction created an additional difficulty, as at times they do not have the documents necessary for access to assistance from social services, in particular the child care grant.

“Being a foreigner, she can’t even apply for a grant, she came here underground, but somehow you still have to help her.”

Berlin, Johansson and Tornkvist (2006: 161) reports that Primary Health Nurses in her study reported challenges in their health care work linked to children and parents of foreign extraction. Heavy social and healthcare workloads were cited as contributing to the nurses’ difficulty when interacting foreign parents and children, particularly in association with socioeconomic deprivation. The nurses then felt dissatisfied with the quality of their work.

It is suggested that there may be a reciprocal relationship between maternal mental health and child health, given that a child’s poor health could generate depressive

symptoms in the mother; depression in these women has a complex aetiology, involving factors as diverse as poverty, marital conflict, domestic violence and lack of control over financial resources. Nutritional deficiencies rarely occur in isolation from other bio-ecologic and psychosocial factors such as economic stress, low social support or unstable life circumstances (Wachs, 2009: 935s; Surkan, Kennedy, Hurley et al, 2011: 612). Another author states that, in most societies, mothers are the primary providers of nutrition and care to young children; this is a demanding task, and poor physical or mental health in mothers might be expected to have adverse consequences on the children's health, nutrition and psychological well-being (Rahman, Patel, Maselko et al, 2008: 579).

Dependency on nutritional supplements

In another study assessing the implementation of the nutrition supplementation programme, problems cited included dependency on the supplements (Hendricks, le Roux, Fernandes et al, 2003: 434).

Participants in this study expressed concern that parents receiving the supplement supply for under-nourished children ended up developing dependence on the supply, and are no longer motivated to provide for their child; a participant observed:

"You find that the milk that you give is the only milk the baby gets from the supplement that you can provide; the mother or the father or whoever are no longer interested in doing anything for the baby; they are looking at the service provider, unfortunately they end up depending on this."

Another participant commented:

"Like the issue of the milk supplements, it could be done away with anyway, because it spoils some of them; you know, it is said, teach a man to fish, don't give him fish."

Sub-optimal feeding practice

The issue of inappropriate feeding practices came up in the discussion, relating to parents' feeding choices and influence from others, even when they have received counselling:

As the respondents clarified:

“Comes the granny, granny comes with her own style, what can you do? That’s where we fight a losing battle.”

A second respondent explained:

“Something that is not right is spread quite easily, unlike the right things, so we try and try, like the food they buy, to try to check if it’s suitable, for whom; even the adverts on TV, sometimes they try to guide us; in most cases when they are supposed to introduce them to the solids, they don’t understand; they are fed, but not the right diet according to the age; we have difficulty with [appropriate] introduction of solids due to pressure on the mother at home and sometimes from the media, like the adverts on TV.”

A participant illustrated a different slant on the issue of inappropriate feeding intervals:

“Another thing is the intervals that they are supposed to be feeding the baby – the mother thinks she can feed the baby like an adult.”

In the revised policy for the protection, promotion and support of appropriate infant and young child feeding, it is stated that inappropriate feeding practices of young children remain one the greatest threats to child health and survival globally (DoH, 2012: 4). The DoH cites a study with inadequate support for infant and child feeding as the main contributing factor (DoH, 2012: 13). The revision of the policy was prompted by a number of factors which include sub-optimal feeding practice and mixed messages by health care personnel (DoH, 2012: 8).

Another study found that despite being informed in counselling, feeding choices made by caregivers were mainly self-determined (43%), in 22% of cases, health staff were cited, while in 16% of cases grandmothers were cited as sources of advice relating to incorrect or inappropriate misinformation (DoH, 2012: 22).

3.2.2.2 **Theme 2: Emotional consequences [affecting service provider and client (parent)]**

A researcher observed that emotional issues appeared to emerge as part of the information obtained from the interviews. In this section, the second theme, relating to the emotional attributes pertaining to the service and those involved in it, will be presented.

3.2.2.2.1 **Category 1: Parental issues**

Issues of emotional consequences relating to the child's parents being informed about its poor health were raised by the participants. An example was the response to the diagnosis of the child as malnourished; in most cases parents accept it and cooperate with the health worker. However, some may not find it easy to accept questions about their child or indeed that the child is under-nourished; according to a respondent:

"when you tell them the child is malnourished, they don't like it, they feel like maybe you are undermining them"

"but, the minute you ask 'mama how are you feeding your child?' she becomes very high and emotional, she may be angry; you try to find out why this person is becoming aggressive, she goes 'what do you take me for? Then she swears at you"

It becomes necessary for the situation to be handled in a comfortable climate to accommodate the emotional consequences that may be felt by parents. A respondent explained:

"Patience and tact are needed, I know it's a sensitive issue to raise a child and then someone else is questioning you about how you are raising your child"

Roberfroid, Kolseren, Hoeree' et al, (2005:9) mention the negative psychological consequence on children and parents because of being classified as malnourished.

An assertion is made that an essential part of the intervention necessitates the creation of a respectful and caring relationship (le Roux, le Roux et al, 2010:4);

these authors found that with the improvement in the health of the child the negative psychological consequence of depression diminished and this trusting relationship could result in behaviour change.

Stewart, Bunn, Vhokiwa et al, (2010: 56) state that maternal distress is a risk factor for child under-nutrition and stunting, and suggest that nutritional rehabilitation programmes should pay increased attention to carer psychological wellbeing.

To conclude, the emotional and psychological well-being of the parent is of utmost importance. It is said that it is a key goal of the IMCI strategy that the effect of these programmes (GMP, IMCI) should relate to the functional capacity of the mothers, and their ability and receptivity to take up the message of the intervention offered; these will be influenced by their mental (and emotional) wellbeing (Rahman, Patel, Maselko et al, 2008: 581).

3.2.2.2.2 **Category 2: Nurse issues (Emotional consequences to those providing the service)**

In this study part of the recurring material identified in thematic content analysis highlighted concerns and challenges affecting the service and those involved in it. Responses obtained offered a view of commitment to positive outcomes despite stressors. However, there is a contention that patients do not suffer in solitude but that their suffering also impacts on those who care for them (Hilliard and O’Niell, 2010: 2908). To support this observation, it is stated that nurses experience intense emotions at work that are fundamental and inseparable parts of human actions in organizations (Huynh, Alderson and Thompson, 2008: 196).

A respondent expressed the sentiment that her experiences of managing malnourished children could be both good and bad; this reflects an overall picture that shows that the aim remains to achieve the stated objectives of the service despite difficult prevailing conditions:

“I could say it is a good and bad service; good when the mother follows the health education you have given, if it was because of lack of information, and you find the mother has listened and the baby growing well again”

Cooperation with parents has been stated to be important to facilitate positive outcomes in the service, but if this is not achievable, the service provider is affected; a participant explained:

“the mothers are also not very cooperative, they make it difficult for you, so it’s a little bit stressful”

Another participant elaborated:

“because it (the service) does have challenges, you know; its demanding, its demanding all the time”

Berlin, Johansson and Tornkvist, (2006: 167) found that many PHC nurses seemed to have difficulty in meeting and dealing with parents’ needs and expectations, which resulted in problems and a sense of frustration. Sekhukhune, (2005: 71) found that nurses in her study experienced hindrances in meaningful contribution to total quality care and this affected their mental health. Nurses may sometimes feel overwhelmed, but colleagues can often be used as a source of support; (Hilliard and O’Niell, 2010: 2912).

Despite the responses obtained in the study that certainly reflect much of the stress and frustration that goes with the daily running of the service, the general demeanor showed intentions to achieve positive outcomes; participants commented:

“it (the service) is quite helpful because you could pick up so many things, including social problems; it really works for both of us, for mums and for us to be able to diagnose and assist”

Another participant corroborated:

“I think they do grow well, the children who are under-nourished; I think it’s the other, the mother in that she’s looking well after the baby; what I realize now, our mothers are educated, it means the health education is really working”

To summarize, the literature also reveals that the manner in which nurses deal with their emotional experiences can affect their nursing care (Hilliard and O’Niell, 2010:2907). Hendersen, 2001: 130 notes that there is little debate about the link

between caring and feeling; asserts that nurses overwhelmingly feel that care is an essential part of cure. Hendersen states that nurses as a group undoubtedly view caring as relevant to their role and concur with a view of nursing as an altruistic vocation with caring as an imperative (Hendersen, 2001: 131).

3.2.2.3 **Theme 3: Participants' recommendations for improvement**

This section is a presentation of suggested recommendations for service improvement from the study participants of the study to give the participants an opportunity to make recommendations to enhance the work environment and thereby improve service management. These are set out below, in line with the identified themes.

3.2.2.3.1 **Category 1: Organisational factors**

Organisational factors emerged as the major challenge in the service as they are involved not only in the structure of the service, but also in the process, and therefore the outcome for the clients of the service.

Participants suggested several solutions which they saw as possibly improving delivery of the service, outlined below.

Communication: Counselling and support

Counselling should be employed to improve knowledge, covering multiple aspects of problems dealing with growth faltering, done by well-trained staff to improve effectiveness; informants felt that this should begin in ANC and should focus on preventive aspects as well as promote good feeding practices including breastfeeding issues around counselling on PMTCT, feeding choices and breastfeeding in ANC would be of benefit; it was felt that it was important that messages be based on common principles to avoid confusion; thus for instance a participant stated:

"To emphasise health talk, especially during ante-natal, before they even deliver, to understand what are the needs of this baby."

A second participant agreed:

"Everyone, wherever the child, the training should start from when the mother is pregnant."

The same views are expressed by Bryce, Coutinho, Darnton-Hill, Pelletier et al (2008: 510), who state that the period from pregnancy to 24 months of age is a crucial window of opportunity for reducing under-nutrition and its adverse effects.

Another aspect was that counselling and education should be broadened to include the community as well as well as to encourage cooperation with parents, as articulated by a respondent:

“Health education to the community, and the cooperation between the mothers and the health providers, that would work much better and it would be easier for us to succeed.”

Recording and reporting

Recording and reporting should be done accurately so that information exchanged is reliable; health information could be enhanced. Strengthening the information system could result in identifying good practice while isolating and removing bad practices (DBSA, 2008: 30). A respondent suggested:

“When you get a child that is malnourished, it is better to enter them immediately on the form, otherwise you are going to miss them.”

An additional suggestion by another respondent was that nursing time should be spent on clients and not spent on non-nursing aspects of the service; according to her:

“The stats collection? You do your own stats, that’s what the recording is for; but the compilation! I think it should be the work of a clerk! At the end of the month you have to do your own totals, it’s time consuming.”

Referral system

Better access to social services could also assist in dealing with underlying social problems. An improvement in the operational capacity of the referral system was also suggested; a participant clarified:

“The problem is that we don’t have social workers here; if the department [City Health Department] had their own social workers.”

A second respondent emphasised:

“Resources needed? Social workers, so that we can assist the poor.”

Thandrayen (2010: 80) suggested that access to social services for clients could be facilitated by collaboration between clinics and the Department of Home Affairs; this researcher suggests that the grant application form could be made available at clinics, along with information on how to apply for the grant and how to obtain the necessary documents. Notably, no mention was made regarding the organisational factors necessary to implement the suggestion, in terms of staffing.

Human resources

Staffing was seen as an important aspect in terms of additional qualified personnel. To lighten the workload would have an effect of overall improvement in the quality of care, by enhancing the continuity of care and improving the opportunity for timely follow-up; this would also have a positive influence on the quality of reported data. According to the DBSA (2008: 36) public sector employment has increased, but has still fallen behind health needs.

“It would be to improve the level of care, to improve the number of staff.”

A second participant clarified further:

“Human resources – it has to be professional people, because even if they [EPWP] have been trained, the training is not adequate; they are just shown what to do, they are not able to understand the underlying principles.”

Training

Training was seen as a continuous necessity for professionals. It could also be extended to support staff; indeed it was suggested that community health volunteers could be offered career paths with human resources involvement, to facilitate their retention in the service and provide continued motivation in the performance of their tasks; as the respondent stated:

“Education, education, like in-service education for health professionals, EPWPs [Expanded Public Works Programme], health promoters, education, in-service education, I would recommend that we have more of that; education goes far, and has a broader reach; it should be given at all opportunities; they could even go for

training at professional level; it's just that at the level they are, they're not getting anything."

In support of the inclusion of support staff in training, it is said that the way they interact with mothers is crucial in the quality of the service. In order to maintain this, they need to be trained in nutritional counseling and supervised for their technical and communication performance, all of which require investments in staff time and running costs (Roberfroid, Kolsteren, Hoeree' et al, 2005: 1126). In addition, these authors also suggest that if provided with sufficient support and supervision, community volunteers at best partly resolve the problem of provision of follow-up after screening (Roberfroid, Kolsteren, Hoeree' et al, 2005: 1127).

A participant saw the need for training to be intensified to promote and maintain service quality; she explained:

"I think intensive training should be done, because, usually it's only one day, you go there for one day for growth monitoring, there's a whole lot of things; health education itself, because I think a lot can be done, it can prevent the condition from occurring, just with health education, it needs to be done frequently, sometimes we forget, and if you practice what you're taught, you will know what is expected of you."

The training of nurses to improve GMP and the targeting of nutritionally at-risk children needs strengthening (Schoeman, Hendricks, Hattingh et al, 2006: 1011); it should also be ongoing and supervised, and should identify and address health workers' individual challenges to improve performance (Hamer, Katvum and Jeffries, 2004: 183). Involvement in planning and information sharing through updates and in-service training could help to keep nurses well informed and motivated;

"like, every time when there are changes, to involve us, every time there is a different way of doing things, they should tell us; just to improve the service, to keep it up to standard"

Indeed, another respondent expanded:

"I think the whole service should be revised or revisited, new ways of doing things, the new methods of how to monitor growth"

Briscoe and Aboud, (2012: 612) concur, stating that it is becoming increasingly critical to address health issues in the developing world, and more tellingly, to find new methods of promoting behaviour change that might prevent illness, particularly in the case of children under the age of five, whose health is a priority.

Additional recommendations concerned adequate equipment such as for accurate anthropometric measurement, which was seen as a requirement to ensure accurate measurement of anthropometric data; according to a respondent:

“The scales, maybe we could have the modern scales and not use the old type where there could be issues of errors; scales should be of the modern era and reliable.”

Cell phone access could also improve follow-up of defaulters as most people have cell-phones; thus if the family had moved, this could improve accuracy of report could be submitted on time.

A respondent suggested:

“I would say the Company [employer] for example, could provide us with airtime, then immediately you would be able to phone, and do something, yes.”

Supplement supplies were seen to need to be looked into, so that identified children could be managed and restored back to health.

“Improvements would be with the supplements that you need to be getting, but with the budget and other constraints, you don’t.”

3.2.2.3.2 **Category 2: Parental factors**

Parents should be treated with respect to build trust relationships and involve them in the management of the child so they become equal partners in the process involved in GMP.

Cooperation between the parent and health care worker should be strengthened, as a respondent described:

“If the parents were cooperating with us, working together, I think it would be much better for both sides.”

3.2.2.3.3 **Category 3: Nurse-related factors**

Nurses could continue to develop their Interpersonal skills; this could enable them to love the work and do it with commitment:

“People employed should love the work, if we could go back to the old nursing.”

Involvement in planning and information sharing through updates and in-service training could help to keep nurses well informed and motivated. Respondents suggested:

“Like, every time when there are changes, to involve us, every time there is a different way of doing things, they should tell us; just to improve the service, to keep it up to standard.”

Indeed the other respondent expanded:

“I think the whole service should be revised or revisited, new ways of doing things, the new methods of how to monitor growth.”

Briscoe and Aboud (2012: 612) concur, stating that it is becoming increasingly critical to address health issues in the developing world, and more tellingly, to find new methods of promoting behaviour change that might prevent illness, particularly in the case of children under the age of five, whose health is a priority.

To summarise, suggestions from respondents revolved around issues of measures to improve communication between different role players in the service, building up of the organisational capacity and strengthening of interpersonal relationships.

3.3 **SUMMARY OF THE FINDINGS**

The study findings illustrate that Child Health Nurses managing children in the GMP service engage in different activities to achieve the objectives of the GMP service. The main activity is that of communication to share information with those involved in the issue of child under-nutrition, including clients, colleagues, those in

management and referral agencies; in this way the intended outcome is prevention, early detection, appropriate management or rehabilitation of the condition.

Detection of malnutrition in a child requires that the Child Health Nurse intervene in accordance with the CoJ GMP policy guidelines. Furthermore, data is recorded for reference, and it is also reported for purposes of monitoring and evaluation of the service.

Three themes emerged from the interviews. These related in the main to certain factors affecting the operation of the service. The first related to some of the organisational characteristics of the service, and how they influenced the delivery of the service in terms of structure (facilities, equipment), process (quality of care, performance of actions to achieve outcomes) and outcomes (change in the client's current and future status) (Thandrayen, 2010: 3). The main issue of concern was that of resources, specifically supplies of the supplementary feeding scheme, and human in terms of staff shortage. An issue related to the human resource factor was insufficient time to carry out required functions adequately.

A further finding was that emotional consequences also play a part in the situation, both from the condition of the child's health and from the antecedent prevailing conditions surrounding the families. It therefore behoves the health worker to conduct herself with appropriate professional skills to manage the situation effectively.

The study participants also brought forward suggestions for improvement of the quality of the service, mainly relating to challenges identified in the discussions.

This is in accordance with the GMP policy guidelines, which state that the service appears to depend on the motivation, commitment, optimism and initiative of the health workers to achieve the objective, provided they obtain the appropriate and adequate resources, fiscal and personnel (CoJ, 2005: 2).

The next chapter deals with conclusions drawn from the study, suggested recommendations to improve management of the service, as well as recommendations for practice and research.

CHAPTER 4

CONCLUSIONS AND RECOMMENDATIONS

4.1 INTRODUCTION

The previous chapter dealt with a discussion of the study findings and literature control. In this chapter, a summary of the study is discussed. The sections following are on conclusions reached, following a synthesis of the analysis and discussion of the study findings. Subsequent subdivisions are concerned with study limitations, recommendations for practice and for further research.

4.2 SUMMARY OF THE STUDY

Malnutrition is a global health and developmental concern. It is associated with high rates of mortality and morbidity in children under the age of five years who die of preventable illnesses (Ministry of Health and Family Welfare India, 2011: 1). Poor nutrition remains one of the greatest threats to child health and survival globally (Department of Health, 2012: 4).

Efforts to combat the problem include the strategy of Growth Monitoring and Promotion, which has been re-focused as a key component of critical preventive care for young children (UNICEF, 2007: 3).

A qualitative, explorative and descriptive approach was used to study the experiences of Child Health Nurses managing malnourished children in Region D of City of Johannesburg. The purpose of the study was to identify factors that affect the effectiveness of the Growth Monitoring and Promotion service. The study focused on challenges facing the service providers; an additional objective was to give the Child Health Nurse an opportunity to make recommendations for the improvement of the service.

The theoretical framework that constituted the perspective from which this study was conducted, relied on the operational principles and objectives of the GMP policy guidelines. The focus was on the nutritional surveillance and promotion of optimal growth and development of young children. These principles were applicable to construct the basis for the conclusions of the study, following analysis of the collected data.

4.3 DISCUSSION OF THE FINDINGS

4.3.1 Introduction

In this study the researcher identified and captured diverse experiences of the study participants, which elucidated a number of challenging factors associated with the GMP service. An important aspect was that the effectiveness of the service depended on early detection, prevention and adequate management of poor nutrition, which were also contingent on the Identification and follow-up of the under-nourished children.

4.3.2 Factors affecting the delivery of the service

The management of the condition was contingent upon the caring practices of the mother or caregiver, who therefore would, in most instances, require counselling and guidance in nutritional aspects of care for the child. However, counselling and sharing of information was affected by time constraints, ability to communicate effectively, as well as other conditions under which the Growth Monitoring and Promotion service was offered.

An additional noteworthy aspect related to the need for proper record keeping. The detection of abnormal weights, and their recording, both on the Road to Health Card, and the clinic record, was a challenge identified. The reporting of identified children in the appropriate statistical forms also raised a concern.

Furthermore, the monitoring and evaluation of the effectiveness and the quality of the service is dependent on the sharing of accurately recorded and reliable information amongst the role players who conduct the service. However, the findings suggest that recording is either done inadequately or not at all. This is regrettable, as planning for the requirements of the service is contingent on accurate information.

The organisational capacity of health facilities/centres to offer this service is an objective mentioned in the Policy guidelines of the City. The findings of this study suggest that organisational factors influence the outcomes of care.

Information stated in a study on the delivery of Primary Health care to children serves to solidify this statement. According to the author, the literature shows that there is repeatedly an emphasis on poor child health delivery in developing countries, in terms of quality measures such as structural problems, process failures and lack of systematic protocols for the supervision of health workers (Thandrayen, 2010: 3, 4).

The constraining factors identified related to organisational processes and structural elements which affected the delivery and quality of the service. These included availability of appropriately trained staff, supply of requirements for the service, and ability to engage in effective follow-up.

A consequence of poor organisational capacity is that there is a low staffing to high workload ratio; the result is that some counselling has to be done by lay workers on temporary contracts, either in the facilities or on home visits. This raises a concern in terms of these workers' skills and motivation for the necessary work. GMP is part of a package of services included in the Child Health programme which is already time - and labour-intensive. Integration of different programmes can enhance service but with no concomitant additional, appropriately-qualified staff, challenges are created.

Respondents were united in the sentiment that it was important to engage effectively with parents in these counselling and support sessions. It was suggested that training, based on common fundamental precepts, for Child Health Nurses and other categories of support staff would go a long way to enhance the counselling given. In support of this, Igarashi, Sasaki, Fujino et al (2010: 581) state that prolonged and adequate implementation of the programme messages helps mothers translate acquired knowledge into better caring behaviour.

Capacity building in terms of both strategic and operational aspects is necessary in order to design, implement and manage nutrition programmes; major changes are needed in the international and national nutrition systems to strengthen the operational and strategic capacities that will allow countries and districts to achieve sustainable and equitable improvements in both maternal and child nutrition (Bryce, Coutinho, Darnton-Hillet al, 2008: 522).

4.3.3 Emotional consequences

Factors negatively affecting the effectiveness of the service also have adverse emotional consequences for the client and the service provider, who may experience conflict and frustration. The organisational characteristics of a particular health care setting, such as ineffective communication, or inadequate supplies, may significantly affect nursing workload (Carayon and Gurses, 2008: 2). Staff experiencing stress and burnout may become dissatisfied with their work, affecting their motivation for high quality performance.

4.4 CONCLUSIONS

The service is dependent on a communication network among target groups and role players. It entails counselling and support of parents of young children, with prevention and management of malnutrition as an intended outcome.

Multiple challenges affecting the provision of the service were identified by respondents. Major constraints were in the areas of human and material resources which were found to be chronically lacking.

Constraints in the service could result in emotional consequences for those involved; stress and frustration in service providers could result in diminished service quality. Huynh, Alderson and Thompson (2008: 200) state that some negative consequences of emotional distress are emotional exhaustion and depersonalisation, which can lead to burnout.

4.5 LIMITATIONS OF THE STUDY

The study participants were purposively selected from only one region (D) out of eight regions within the CoJ, implying a shortcoming in terms of the specific context of the geographical area of Johannesburg. Though studies conducted in the qualitative paradigm are not primarily concerned with the intention to generalise, it would nonetheless be interesting to obtain a perspective from a different context or setting.

4.6 RECOMMENDATIONS

Recommendations for nursing practice, research and education will be suggested based on the study findings.

4.6.1 Recommendations from Study Participants

Some recommendations for mitigating the effects of the identified factors from the participants are as follows.

- Strengthen counselling and support for nurses, and monitor its effectiveness, to achieve appropriate behaviour change.
- Train staff in appropriate interpersonal skills to improve proficiency in communicating with clients. This would enable cooperation with parents to deal with the situation as partners and improve service outcomes.
- Provide ongoing intensified training for all categories of health workers, with concomitant career development for temporary lay-staff, to keep health workers up to date with new developments, and enhance motivation and therefore service quality.

- Improve the accuracy of recorded data, and the management of statistical reports, possibly employing clerical staff to record and report information more reliably.
- Improve access to social services. The communication network of the service requires a well-functioning referral system. It could offer assistance when parental social circumstances require referral to agencies outside of the facilities. However, it could present problems if not effective.
- Ensure ready availability of nutritional supplements to avoid disappointing parents who expect to receive these.
- Look into increasing human resources/personnel for the service.

4.6.2 **Recommendations for Nursing Practice**

Submitting accurate and reliable information to the Health Information System is of utmost importance in planning and allocating service requirements.

It has been stated previously that data collection, collation and reporting is a primary responsibility of Child Health Nurses.

Training, feedback and updates could keep nurses motivated for data management.

When planning and allocating resources, involving the community and consulting with the regional authority and key health stakeholders could go a long way towards establishing an integrated PHC organisation; this was done successfully in an evaluation of the performance, quality and sustainability of the health system in a community in Elmore, Australia (Buyks, Humphreys, Tham et al, 2012: 3).

4.6.3 **Recommendations for Nursing Education and Training**

Nursing curricula should include HIS research and health system logistics to enhance health workers' understanding of such issues, and how they affect the working environment.

Continuing nursing training should be strengthened and could assist in improving the quality of care and in maintaining service standards.

Current anecdotal information is that training sessions may disrupt service delivery in the workplace; a respondent mentioned that continuity of service can be affected when staff attend training. At a Nursing Research workshop, it was recommended that innovative ways of implementing such training need to be found in order not to disturb the workplace (Rispel, 2008: 12).

4.6.4 **Recommendations for Nursing Research**

This study highlighted challenges identified in the experiences of nurses managing children in the GMP service; it would certainly be interesting/ worthwhile to find what other nurses experience in other programmes in PHC and what recommendations they might come up with.

Further studies could be done to clarify the roles and status of nurses within the health system; Mabaso (2006: 47) states that in South Africa, nurses substitute medical practitioners; however, according to Rispel (2008: 16) the relative powerlessness of nurses is a matter for discussion, and issues of the power of nurses should be a key focus. In the paper on Research on the state of Nursing in South Africa, challenges identified included resource constraints, low productivity and morale, and poor working conditions (Rispel, 2008: 17). Further research could identify the causes of such challenges, and how to resolve them; involvement of professional nurses in planning new developments could assist in keeping them motivated to continue working with commitment to the service.

4.7 **FINAL CONCLUSION**

The final conclusion of this work is that the qualitative journey of this study has offered an opportunity for exploration of the experiences of child health nurses in their field world of work. Multiple challenges were identified within the GMP service in this study. These included organisational and structural failures affecting the system, and the consequences felt by both the users and the providers of health care. The literature suggests that these challenges are not unique within the health care system in general.

Understanding the challenges affecting the service could have a positive outcome on service quality. It is hoped that the findings will go some way towards improving and maintaining the health of the people, starting from childhood, by helping stakeholders involved in strengthening the health service to find common ground. The possibility that identifying and resolving these challenges will have a constructive effect is certainly something to keep striving for.

REFERENCES

- Berlin, A., Johansson, S.E. and Tornkvist, L. 2006. Working conditions and cultural competence when interacting with children and parents of foreign origin – Primary child nurses' opinions. *Scandinavian Journal of Caring Science* **20**: 160–168.
- Bourne, L.T. 2007. South African food based dietary guidelines. *Maternal and child nutrition* **3**: 227–229.
- Bourne, L.T., Hendricks, M.K., Marais, D. and Eley, B. 2007. Addressing malnutrition in young children in South Africa. Setting the national context for paediatric food-based dietary guidelines. *Maternal and Child Nutrition* **3**: 230–238.
- Brink, H.L. 2006. *Fundamentals of research methodology for health care professionals*. (2nd Ed). Cape Town: Juta & Co.
- Briscoe, C. and Aboud, F. 2012. Behavior change communication targeting four health behaviours in developing countries: A review of change techniques. *Social Science and Medicine* **75** (2012): 612–621.
- Bryce, J., Coutinho, D., Darnton-Hill, I., Pelletier, D. and Pinstrup-Anderson, P. 2008. Maternal and child under-nutrition: effective action at national level. *The Lancet* **371**: 510–526.
- Burns, N. and Grove, S.K. 2007. *Understanding Nursing Research: Building an Evidence-Based Practice* (4th ed). Missouri: Saunders.
- Buyks, P., Humphreys, J.S., Tham, R., Kinsman, L., Wakeman, J., Asaid, A. and Tuohey, K. 2012. How do small rural primary health systems sustain themselves in a constantly changing health system environment? *Health Services Research* **12** (81): 1–7.
- Carayon, P. and Gurses, A.P. 2008. *Nursing workload and patient safety – a human factors engineering perspective*. Available at www.ahrg.nhs.gov [Accessed 2013 02 23].
- Charlton, K.E., Kawana, B.M. and Hendricks, M.K. 2009. An assessment of the effectiveness of growth monitoring and promotion practices in the Lusaka district of Zambia. *Nutrition* **25** (03.008): 1035–1046.
- Chenitz, W.C. and Swanson, J.M. 1986. *From Practice to Grounded Theory. Qualitative Research in Nursing*. Carlifornia: Addison-Wesley.
- Chopra, M., Lawn, J. E., Sanders, D., Barron, P., Abdul Karim, S.S., Bradshaw, D., Jewkes, R., Abdul Karim, Q., Flisher, A.J., Mayosi, B.M. Tollman, S.M., Churchyard, G.J. and Coovadia, H. 2009. Achieving the health millennium goals for South Africa: challenges and priorities. *The Lancet* **374** (9694): 1023–1031.
- City of Johannesburg. 2005. *Policy Guidelines for Growth Monitoring and Promotion*. Johannesburg.
- Collins Students' Dictionary. 2006. Glasgow: HarperCollins.
- Daviaud, E. and Chopra, M. 2008. How much is not enough? Human resources requirements for primary health care: a case study from South Africa. *Bulletin of the World Health Organization* **86** (1): 46–51.

- De Vos, A.S. 2002. *Research at Grass Roots: a Primer for Caring Professions*. Van Schaik: Pretoria.
- Dennil, K and Rendakk-Mkosi, K. 2012. *Primary Health Care in Southern Africa: A Comprehensive Approach*. Cape Town: Oxford University Press.
- Department of Health. 2004. *Strategic priorities for the National Health System 2004–2009*. Pretoria: Department of Health.
- Department of Health. 2007. *Supplementary Feeding Scheme Policy Document*. Pretoria: Department of Health.
- Department of Health. 2010. *The South African National Nutrition Supplementation Guidelines for at Risk and Malnourished Children and Adults*. Pretoria: Department of Health.
- Department of Health. 2011. *Progress report on the implementation of the 10 point plan for the health sector 2009–2014*. Available at www.doh.gov.za [Accessed 2013 03 02].
- Department of Health. 2012. *Infant and Young Child Feeding Policy*. Pretoria: Department of Health.
- Department of Health. 2001. *Training Modules for Growth Monitoring and Promotion: The Road to Health*. Pretoria: Department of Health.
- Development Bank of Southern Africa. 2008. *Input Paper for Health Roadmap: combating malnutrition in South Africa*. Available at www.dbsa.org.za [Accessed 20130221].
- Gakidou, E., Oza, S., Fuertes, C.V., Amy, Y.L. and Lee, D.K. 2007. Improving child survival through environmental and nutritional interventions. *Journal of the American Medical Association* **298** (16): 1876–1887.
- Gerrish, K. and Lacey, A. 2006. *The Research Process in Nursing*. Blackwell: Oxford.
- Gibbs, C.R. and Taylor, C. 2005. *Learning qualitative data analysis on the web*. Online QDA available at <http://onlineqda.hud.ac.uk/Intro> [Accessed 2010 09 22].
- Growth and Development Strategy. 2013. *Public health – child health expanded programme on immunization*. Available at www.joburg.org.za [Accessed 2013 10 26]
- Hamer, C., Katvum, K., Jeffries, D. and Allen, S. 2004. Detection of severe protein–energy malnutrition by nurses in the Gambia. *Archives of Diseases in Childhood* **89**: 181–184.
- Hendersen, A. 2001. Emotional labour and nursing: an under-appreciated aspect of caring work. *Nursing Inquiry* **8**: 130–138.
- Hendricks, M.K., Goeiman, H. and Dhansay, A. 2007. Food-based dietary guidelines and nutrition interventions for children at primary healthcare facilities in South Africa. *Maternal and Child Nutrition* **3**: 251–258.
- Hendricks, M.K., le Roux, M., Fernandes, M. and Irlam, J. 2003. Evaluation of a nutrition supplementation programme in the Eastern Cape Province of South Africa. *Public Health Nutrition* **6**(5): 431–437.

- Henning, E., van Rensburg, W. and Smit, B. 2004. *Finding your way in Qualitative Research*. Van Schaik: Pretoria.
- Hilliard, C. and O'Neill, M. 2010. Nurses' emotional experiences of caring for children with burns. *Journal of Clinical Nursing* **19**: 2907–2915.
- Huynh, T., Alderson, M. and Thompson, M. 2008. Emotional labour underlying caring: an evolutionary concept analysis. *Journal of Advanced Nursing* **64**(2): 195–208.
- Igarashi K., Sasaki, S., Fujino, Y., Naohito T. and Muleya C.M. 2010. The impact of an immunization programme administered through the growth monitoring programme plus as an alternative way of implementing integrated management of childhood illness in urban-slum areas of Lusaka, Zambia. *Transactions of the Royal Society of Tropical Medicine and Hygiene* **104** (008): 577–582.
- Imdad, A., Yawar, M. and Bhutta, Z.A. 2011. Impact of maternal education about complementary feeding and provision of complementary foods on child growth in developing countries. *Public Health* **11** (3): 1–14.
- Iversen, P.O., Hoisaether, E.A., Morseth, M. and Herselman, M. 2011. Diverging opinions of supplementation programmes between mothers of small children and staff at primary clinics in the Western Cape Province of South Africa. *Public Health Nutrition* **12** (5): 923–930.
- Jackson, A.A., Ashworth, A., and Khanum, S. 2006. Improving child survival: Malnutrition Task Force and the paediatrician's responsibility. *Archives of Diseases in Childhood* **91**: 706–710.
- Jackson, W. and Verberg, N. 2007. *Qualitative Research Methods*. Canada: Pearson Education.
- Jinabhai, C.C., Taylor, M. and Sullivan, K.R. 2005. Changing patterns of under-and over- nutrition in South African children – future risks for non-communicable diseases. *Annals of Tropical Paediatrics* **5**: 3–15.
- Kautsky, K. and Tollman, S. M. 2008. *A perspective on primary health in South Africa*. Available at www.hst.org.zachap_08 [Accessed 2013 03 01].
- Klopper, H.C. 2007. Poverty and development: Pulling forces and the challenges for nursing in Africa. *Nursing and Health Sciences* **9**: 295–303.
- Krefting, L. 1991. Rigor in qualitative research: the assessment of trustworthiness. *The American Journal of Occupational Therapy* **45** (3): 214–222.
- Larsen, L., Mandleco, B., Williams, M. and Tiedman, M. 2006. Childhood obesity: prevention practices of nurse practitioners. *Journal of the American Academy of Nurse Practitioners* **18**: 70–79.
- Le Roux, I., le Roux, K., Comulada, W.S., Greco, E.M., Desmond, K.A., Mbewu, N. and Rotherman-Borus, M.J. 2010. Home visits by neighborhood mentor mothers provide timely recovery from childhood malnutrition in South Africa: results from a randomized control trial. *Nutrition Journal* **9** (56): 1–10.
- LeCompte, M.D. 2000. Analyzing qualitative data. *Theory into practice*. **3**(3). Ohio: Ohio State University.
- Leech, R., van Wyk, N.C. and Uys, C.J.E. 2007. The management of infant development needs by

community nurses. *Curationis* **30** (2): 91–103.

Lincoln, Y.S. and Guba, E.G. 1985. *Naturalistic Inquiry*. Newberry Park: Sage Publications.

Mabaso, S.S. 2006. *Evaluation of a decentralized primary health care training programme*. Thesis submitted to the University of South Africa. Available at uir.unisa.ac.za [Accessed 2012 11 14].

Mazibuko, N.S. 2006. *A descriptive study on constraints faced by Gauteng IMCI trained health workers*. Research report submitted to the Faculty of Health Sciences, University of the Witwatersrand.

Ministry of Health and Family Welfare India. 2011. *Operational guidelines on the facility based management of children with severe acute malnutrition*. Available at www.mofhw.nic.in [Accessed 2013 03 04].

Monte, C.M.G. 2000. Malnutrition: a secular challenge in nutrition. *Jornal de Pediatria* **76**(3): s285–29.

Morse, J.M. 1989. *Qualitative Nursing Research A Contemporary Dialogue*. California: Sage Publications.

Morse, J.M. 1994. *Critical Issues in Qualitative Research Methods*. California: Sage Publications.

Morse, J.M. 1997. *Completing a Qualitative Project: Details and Dialogue*. California: Sage Publications.

Morse, J.M. and Field, P.A. 2001. *Nursing Research: the Application of Qualitative Approaches* (2nd ed). Cheltenham: Stanley Thorne.

Mouton, J. and Marais, H.C. 1996. *Basic Concepts in the Methodology of the Social Sciences*. Pretoria: HSRC.

Munhall, P.L. 2001. *Nursing Research: A Qualitative Perspective*. Massachusetts: Jones and Bartlett.

O'Neill, S., Fitzgerald, A., Briend, A. and Van den Broeck, J. 2012. Child mortality as predicted by nutritional status and recent weight velocity in children under two in rural Africa. *Journal of Nutrition* **143** (7): 520–525.

Onwuegbuzie, A.J., Witcher, A.E., Collins, K.M.T., Filer, J.D., Wiedmaier, C.D. and Moore, C.W. 2007. Students' perceptions of characteristics of effective college teachers: a validity study of a teaching evaluation form using a mixed methods analysis. *American Educational Research Journal* **44** (1): 113–160.

Paterniti, D.A. 2005. *Data Collection and Analysis in Qualitative Research Methods*. Department of General Medicine. California: University of California.

Polit, D.F., Beck, C.T. and Hungler, B.P. 2001. *Essentials of Nursing Research. Methods, Appraisal and Utilization* (5th ed). Philadelphia: Lippincott Williams & Wilkins.

Rahman, A., Patel, V., Maselko, J. and Kirkwood, B. 2008. The neglected “m” in MCH programmes – why mental health of mothers is important for child nutrition. *Tropical Medicine and Public Health* **12** (4): 579–583.

Rispel, L. 2008. *Research on the state of nursing; exploring nursing policies, practice and management*

in South Africa. Workshop Report, University of the Witwatersrand.

Rispel, L., Molomo, B. and Dumela, S. 2008. *South African case study on social exclusion*. Available at www.hspress.ac.za [Accessed 2013 02 23].

Roberfroid, D., Kolsteren, P., Hoérée, T. and Maire, B. 2005. Do growth monitoring programs answer the performance criteria of a screening program? A critical analysis based on a systemic review. *Journal of Tropical Medicine and International Health* **10** (11): 1121–1133.

Roberfroid, D., Pelto, G.H. and Kolsteren, P. 2007. Plot and see! Maternal comprehension of growth charts worldwide. *Journal of Tropical Medicine and International Health* **12** (9): 1047–1086.

Schoeman, S.E., Hendricks, M.K., Hatting, S.P., Benade, A.J.S. and Laubscher, J.A. 2006. The targeting of nutritionally at-risk children attending a primary health care facility in the Western Cape Province of South Africa. *Public Health Nutrition* **9** (8): 1007–1012.

Sekhukhune, D. 2005. *A model to facilitate a quest for emotional maturity of psychiatric nurses through capacity development in promoting their emotional health*. Thesis submitted to the Faculty of Health Sciences, University of Johannesburg.

Shenton, A.K. 2004. Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information* **22** (2004): 63–75.

Stewart, R.C., Bunn, J., Vhokiwa, M., Umar, E., Kauye, F., Tomenson, B., Rahman, A. and Creed, F. 2010. A prospective study of psychological distress among mothers of children admitted to a nutritional rehabilitation unit in Malawi. *Child: Care, Health and Development* **3** (1): 55–63.

Streubert, H.J. and Carpenter, D.R. 1995. *Qualitative research in nursing: Advancing the humanistic imperative*. Philadelphia: J.B. Lippincot.

Surkan, P.J., Kennedy, C.E. and Hurley, K.M. 2011. Maternal depression and early childhood growth in developing countries: a systematic review and meta-analysis. *Bulletin of the World Health Organization* **287**: 607–515.

Swart, R., Sanders, D. and McLachlan, M. 2008. *Nutrition: A primary health perspective*. Available at www.hst.org. [Accessed 2013 03 01].

Thandrayen, K. 2010. *The quality of child health services offered at primary health care clinics in Johannesburg*. Thesis submitted to the Faculty of Medicine University of the Witwatersrand. Available at www.wiredspace.wits.ac.za [Accessed 2012 02 13].

United Nations Children's Fund. 2007. *Revisiting growth monitoring and its evolution to promoting growth as a strategic systems approach: building consensus for future program guidance*. Available at www.unicef.org.za [Accessed 2013 03 01].

Van Zyl, S. 2010. *How to do thematic content analysis; some suggestions*. Johannesburg: University of the Witwatersrand.

Wachs, T.D. 2009. Models linking nutritional deficiencies to maternal and child mental health. *American Journal of Nutrition* **89** (s): 935s-939s.

Wallace, A.S., Ryman, T.K. and Dietz, V. 2012. Experiences integrating delivery of maternal and child

health services with childhood immunization programme: systematic review update. *The Journal of Infectious Diseases* **205** (Supp 1): s6–19.

Woolford, S.J., Clark, S.J., Lumeng, J.C., Williams, D.R. and Davis, M.M. 2007. Maternal perspectives on growth and nutrition counselling provided at pre-school well-child visits. *Journal of the National Medical Association* **99** (2): 153–158.

World Health Organization. 1978. *Declaration of Alma Ata: International Conference on Primary Health Care, Alma Ata, USSR*. Available at www.who.int [Accessed 2013 02 19].

World Health Organization. 1998. Health for all in the 21st century: An introduction. Available at www.euro.who.int. [Accessed 2013 03 02].

World Health Organization. 2012. *Proposed global targets for maternal, infant and young child nutrition*. Available at <http://www.who.int> [Accessed 2013 02 21].

Yang, H. and de Onis, M. 2008. Algorithms for converting estimates of child malnutrition based on the NCHS reference into estimates based on the WHO Growth Standards. *BMC Pediatrics* **8** (19): 1471–2431.

Zere, E. and McIntyre, D. 2003. Inequities in under-five child malnutrition in South Africa. *International Journal for Equity in Health* **2** (7): 1–10.

ANNEXURE A

▪ INTERVIEW GUIDE

EXPERIENCES OF CHILD HEALTH NURSES MANAGING MALNOURISHED CHILDREN IN THE GROWTH MONITORING AND PROMOTION IN REGION D, GAUTENG PROVINCE

Main Question

I would like you to tell me about your experiences of managing under-nourished children in the GMP service.

Probes

- Activities involved in the management of these children
- Conditions under which the service is offered
- Challenges related to this part of your work
- Views on the issue of child under-nutrition
- Areas which need to be improved
- Suggestions/recommendations for the service

ANNEXURE B

- **APPROVAL FROM HEALTH SCIENCES POST GRADUATE COMMITTEE (University of the Witwatersrand)**



Faculty of Health Sciences
Medical School, 7 York Road, Parktown, 2193
Fax: (011) 717-2119
Tel: (011) 717-2075/6

Reference: Ms Tania van Leeve
E-mail: tania.vanleeve@wits.ac.za
04 February 2010
Person No: 8330671
PAG

Ms H Magalemele
771 Valley Road
Meredale X 15
2091

Dear Ms Magalemele

Master of Science in Nursing: Approval of Title

We have pleasure in advising that your proposal entitled "*Experiences of child health nurses managing malnourished children in the growth monitoring and promoting services in region D, Gauteng Province*" has been approved. Please note that any amendments to this title have to be endorsed by the Faculty's higher degrees committee and formally approved.

Yours sincerely

A handwritten signature in black ink, appearing to read "S. Benn".

Mrs Sandra Benn
Faculty Registrar
Faculty of Health Sciences

ANNEXURE C

▪ ETHICAL CLEARANCE CERTIFICATE: HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG
Division of the Deputy Registrar (Research)

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)
 R14/49 Ms Henrietta Magalemele

CLEARANCE CERTIFICATE

M091116

PROJECT

Experiences of Child Health Nurses Managing Malnourished Children in the Growth Monitoring and Promotion Service at Region D, Gauteng Province

INVESTIGATORS

Ms Henrietta Magalemele.

DEPARTMENT

Department of Nursing Education

DATE CONSIDERED

2009/11/27

DECISION OF THE COMMITTEE*

Approved unconditionally

Unless otherwise specified this ethical clearance is valid for 5 years and may be renewed upon application.

DATE

14/01/2010

CHAIRPERSON


 (Professor PE Cleaton-Jones)

*Guidelines for written 'informed consent' attached where applicable
 cc: Supervisor : AM Tshabalala

DECLARATION OF INVESTIGATOR(S)

To be completed in duplicate and **ONE COPY** returned to the Secretary at Room 10004, 10th Floor, Senate House, University.

I/We fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee. **I agree to a completion of a yearly progress report.**

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES...

ANNEXURE D

▪ REQUEST TO THE CITY OF JOHANNESBURG FOR PERMISSION TO CONDUCT STUDY

University of the Witwatersrand
Department of Nursing Education
No 7 York Road
Park Town

To: The Chairperson – Research Committee
Department of Health
City of Joburg

Dear Madam

REQUEST FOR PERMISSION TO CONDUCT A STUDY IN REGION D

I, Henrietta Magalemele, an employee of the City, and also a student at the above educational institution, hereby request permission to conduct a study in region D for the purpose of obtaining a Master of Science degree at Wits University. The purpose of the study is to explore and describe the experiences of Child Health Nurses managing malnourished children in the Growth Monitoring and Promotion service. Data will be collected from professional nurses working in the child health service.

The study is qualitative and will involve in-depth interviews using a semi-structured interview guide lasting approximately 45–90 minutes. The researcher will be responsible for conducting the interviews and any clarification required will be done accordingly. The discussions occurring during interviews will remain strictly confidential. Permission to record the interviews on tape for transcription will be obtained from each participant, who will also sign written consent to participate in the study. Anonymity is guaranteed, and no identifying data will appear on transcripts, dissertation or publication.

Permission will be sought from professional nurses willing to participate in the study. There are no risks involved. Refusal to participate in the study or withdrawal at any time is assured. Findings of the study will be made available to Primary Health management and staff members.

For more information or any queries, please contact me at 072 785 1845 or 011 984 4050.

Yours faithfully

H. Magalemele

ANNEXURE E

- APPROVAL FROM GAUTENG DEPARTMENT OF HEALTH AND SOCIAL DEVELOPMENT (Policy, Planning and Research Committee)

GDH RESEARCH PROPOSAL EVALUATION FORM

For approval by Director: Policy, Planning and Research



HEALTH AND SOCIAL DEVELOPMENT (GDHSD)

POLICY, PLANNING AND RESEARCH (PPR)

Enquiries: Sue le Roux

Tel: +2711 355 3212

Fax: +2711 355 3675

Email: Sue.Leroux@gauteng.gov.za

SECTION A

Researcher Name	H. Magalemele
Physical Address	Nursing Department, University of Witwatersrand, Johannesburg, 2001
Postal Address	Nursing Department, University of Witwatersrand, Johannesburg, 2001
Telephone	+2772 785 1845 or +2711 984 4050
Email	magalemele@gmail.com
Institution	Nursing Department, University of Witwatersrand, Johannesburg
Research Topic	Child Health Nurses Experience of Managing Malnourished Children in the Growth Monitoring and Promotion Service in Region D, Gauteng Province
Date Received by the Directorate PPR	08 April 2010
Date Received Reviewer	13 April 2010
Final Review Date	14 April 2010
Date Submitted to Director of PPR	15 April 2010
Research Site(s)	Johannesburg's Region D Local Authority Clinics
Type of research	Qualitative, Descriptive and Exploratory. 15 nurses from 14 clinics will be recruited.
Supervisor	AM Tshabalala

ONLY FOR APPROVAL OF THE RESEARCH STUDY ENTITLED "CHILD HEALTH NURSES EXPERIENCE OF MANAGING MALNOURISHED CHILDREN IN THE GROWTH MONITORING AND PROMOTION SERVICE IN REGION D, GAUTENG PROVINCE" TO BE CONDUCTED BY H MAGALEMELE

SECTION B- PROPOSAL REVIEW

	YES	NO	Comments
1. Is this research project within the scope of the Department of Health key policy priorities/directives?	√		Child Health and prevention of illnesses related to malnutrition and other underlying causes is an important policy directive for GDHSD.
2. Content of Research:			The study will investigate experiences of nurses that are involved in managing the malnourished children under the Growth Monitoring and Promotion Service (GMPS). Understanding their experiences will help the department to reform the programme by addressing all the challenges they face.
▪ Original work	√		
▪ New facts, ideas	√		
▪ Confirmation of uncertain data		√	
▪ Repetition of known data and consequently of limited importance		√	
▪ Insufficient research information	√		
▪ Confusion of topics/questions		√	
3. Is the title of the research project suitable?	√		The title of the study is: "Child Health Nurses Experience of Managing Malnourished Children in the Growth Monitoring and Promotion Service in Region D, Gauteng Province"
4. Are the objectives of the research project adequate?	√		<u>Objectives</u> 1. To explore and describe child health nurses's experiences of managing child malnutrition in the Growth Monitoring and Promotion Service (GMPS); 2. To identify and describe challenges faced by the child health nurses in the GMPS; 3. To give child health nurses an opportunity to make recommendations to enhance their working environment and therefore improve management of the service.
5. Could the objectives be limited to better focus on the project's main objective?		√	

SECTION B- PROPOSAL REVIEW			
	YES	NO	Comments
6. Writing style			
▪ The text of the proposal is clear	√		
▪ The nomenclature used is correct	√		
▪ The references used are relevant, comprehensive and accurate (corrected)		√	
▪ The spelling and grammar are correct	√		
▪ The language needs improvement		√	
▪ The research proposal needs restyling and rewriting		√	
7. Are the research methods appropriate to the study	√		
8. Does the study have ethical approval? If yes, name the ethics committee	√		Yes Officially granted ethics approval on 14th January 2010 by the Wits Human Research Ethics Committee (Medical). The certificate is attached.
9. Is data collection method in line with study design?	√		
10. Is time frame of the proposal adequate to meet the objectives?	√		
11. Is it stated in the proposal the method of dissemination of the results of the research project?	√		Not specified
12. Is the possible conflict of interests clarified?	√		
13. Are financial implications and financial support transparent?	√		There is no financial implication of this study for GDHSD.

SECTION C - SUMMARY OF THE RESEARCH PROPOSAL

The proposed study by H Magalemele will explore and describe experiences of child health nurses that are involved with the Growth Monitoring and Promotion Service (GMPS) in Region D of the CoJ. A qualitative study will be conducted and 15 nurses out of 14 Local Authority Clinics that are involved in the programme will be recruited. Interviews, individually or in focus groups will be conducted and all the information will be tape recorded.

The objectives of the study are:

- 1) To explore and describe child health nurses's experiences of managing child malnutrition in the Growth Monitoring and Promotion Service (GMPS);
- 2) To identify and describe challenges faced by the child health nurses in the GMPS;
- 3) To give child health nurses an opportunity to make recommendations to enhance their working environment and therefore improve management of the service.

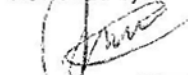
Ethics clearance certificate was obtained from Wits Human Research Ethics Committee (Medical) and the study is potentially not harmful in any way to participants.

The research project has no financial implications for the GDHSD and is therefore recommended for approval unconditionally.

SECTION D – REVIEW
RECOMMENDATION AND APPROVAL

REVIEW

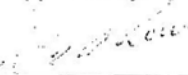
Reviewed by:



Mr. Sisiwe Mkhoka
Deputy Director: Policy, Planning and Research
Date: 14/04/10

Approval

Approved by:



Ms. S. le Roux
Director, Policy, Planning and Research: Gauteng Provincial Department of Health and Social
Development
Date: 16/04/2010

AGREEMENT BETWEEN THE GAUTENG DEPARTMENT OF HEALTH AND SOCIAL DEVELOPMENT (GDHSD)
AND THE RESEARCHER

Ms. S le Roux

Director: Policy, Planning and Research

Date: 16/04/2010

Signature: _____

Name and surname of Principal Researcher

HENRIETTA MAGALEMELE
Research/Academic Institution UNIVERSITY OF THE WITWATERSRAND

Date: 2010 05 17

Signature: _____

ANNEXURE F

▪ LETTER FROM THE CITY OF JOHANNESBURG FOR PERMISSION TO CONDUCT RESEARCH



a world class African city

ENQUIRIES: C. Fraser
Tel: +27(0) 11 407 7437
Tel: +27(0) 11 407 6840

4th Floor B Block
Metropolitan Centre
158 Loveday Street
Braamfontein

PO Box 31244
Braamfontein
South Africa
2017

Tel: +27(0) 11 407 7513
Fax: +27(0) 11 339 2886

30 April 2010

Dear Ms Magalemele

APPROVAL TO CONDUCT RESEARCH WITHIN HEALTH IN THE CITY OF JOHANNESBURG

Permission has been granted to you to conduct research in the Health Department within the City of Johannesburg.

Topic: Experiences of Child Health Nurses managing Malnourished Children in the Growth Monitoring and Promotion Service in Region D Gauteng Province.

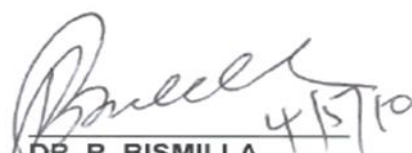
Please contact the following person(s) before you commence with your project and to gain access to the clinics:

Region	Regional Health Manager	Contact No.	Cell phone
D	Ms Mabel Ngcobo	011 986 0164	082 467 9316

Should you have any queries please do not hesitate to contact our department.

We look forward to your Final Research Report.

Thank you


DR. R. BISMILLA
Executive Director
City of Johannesburg
Health Department

ANNEXURE G

▪ PARTICIPANT'S INFORMATION LETTER

EXPERIENCES OF CHILD HEALTH NURSES MANAGING MALNOURISHED CHILDREN IN THE GROWTH MONITORING AND PROMOTION SERVICE AT REGION D, GAUTENG PROVINCE

CHILD HEALTH NURSE INFORMATION LETTER

Dear Colleague

My name is Henrietta Magalemele and I am a student in the Health Sciences Faculty of the University of the Witwatersrand. I would like to invite you to participate in a study to explore and describe the experiences of Child Health Nurses working in the GMP. The research is part of the requirements for the degree of Master of Science in Nursing.

Should you agree to participate in this study, an interview using a structured interview guide will be conducted. This should take 45–90 minutes. The researcher will be responsible for conducting the interview and for providing any clarification. With your written permission, the interview will be tape-recorded for transcription purposes. The interview and accompanying discussion will remain strictly confidential. Anonymity is guaranteed as neither names nor other identifying data will be recorded on the transcripts, dissertation or any published article from the data. Recordings, transcriptions and any other data will only be accessible to the researcher and the supervisor and will be stored securely.

Participation is entirely voluntary. There are no risks involved. Refusal to participate in or withdraw from the study at any time will not be detrimental to you in any way. Your responses will remain confidential. You will remain anonymous. Should you agree to participate, please sign the accompanying consent form.

Finding from the study will be made available to Health Department management and permanent staff members (participants) during the course of the study and after completion; if such findings published, your anonymity is still guaranteed.

For further information/queries:

Research Supervisor: Maude Tshabalala 011 488 4267 (w) 083 460 9913 (c)

Research Office Administrator: Anisa Keshav (011 717 1234)

Thank you for taking time to read this information letter.

H. Magalemele

011 984 4050(w)

072 785 1845 (c)

ANNEXURE H

▪ CONSENT FORM FOR INTERVIEW

EXPERIENCES OF CHILD HEALTH NURSES MANAGING MALNOURISHED CHILDREN IN THE GROWTH MONITORING AND PROMOTION SERVICE AT REGION D, GAUTENG PROVINCE

CONSENT FORM FOR PROFESSIONAL NURSES

I have been fully informed about the study and understand the contents of the information sheet, and thus give consent to participate in the study. I have had an opportunity to ask questions and these have been answered to my satisfaction. I understand that I may withdraw from the study without penalty. There will be no remuneration for participating. I give consent for the interview to be recorded on tape.

SIGNATURE OF PARTICIPANT: _____ **DATE:** _____

SIGNATURE OF INVESTIGATOR: _____ **DATE:** _____

In my judgment, the participant is voluntarily and knowingly giving consent and possesses the legal capacity to give informed consent to participate in this study.

ANNEXURE I

▪ CONSENT FORM FOR AUDIO-RECORDING

EXPERIENCES OF CHILD HEALTH NURSES MANAGING MALNOURISHED CHILDREN IN THE GROWTH MONITORING AND PROMOTION SERVICE AT REGION D, GAUTENG PROVINCE

CONSENT FORM FOR AUDIORECORDING OF INTERVIEWS

I have consented to participate in the above study. I have been informed of the necessity of recording the interviews for transcription and analysis purposes. The recordings and transcripts will be stored securely and will only be accessible to the researcher and the supervisor.

SIGNATURE OF PARTICIPANT: _____ DATE: _____

SIGNATURE OF INVESTIGATOR: _____ DATE: _____

ANNEXURE J

▪ TRANSCRIPT SPECIMEN

Mp KSW TRANSCRIPT

B6/B7 2011 06 01

INV: First of all, I would like you to tell me of your experiences of managing malnourished children, that's the first question

PAR: My experiences in managing malnourished children, ok, hmmm, I've had both good and bad, ok one of the good experiences would be when you identify the child is malnourished and then you give health education to the mother, the mother follows whatever health education you have given, for instance you try to determine if the malnutrition is because of poverty or if it is because of lack of information on what to give the baby, so the other one would be, its always nice to see the mothers listening to you, and when the baby comes next time you see that the mother has taken the advice and the baby is growing well again, is gaining the weight according to the age or as expected; and one of the bad experiences, some of the mothers, they feel like you are, when you tell them the child is malnourished, they don't like it, it feels like maybe you are undermining them, and a person will tell you that I've had 3 kids or 4 kids, don't tell me how to bring up my child, I've got all the experience, then they swear at you, and you still try, you know, you must maintain the calm, you keep calm, you try to find out why this person is becoming so aggressive, you find out from her, have you registered for grant, she may be angry, you think that I'm eating the grant money, or I'm smoking it or I'm drinking it, what do you take me for, and you just want to find out if the child is getting a grant, if not so that you can refer to the social workers, hm.

INV: Because you do need to find out why this child is like that. Ok, thank you. Now, please tell me about the Growth Monitoring and Promotion

PAR: Ok, Growth monitoring, it's done, it's when we monitor the growth of children from birth until five years, and then from birth until two years, they should be monitored monthly, but personally, I do it depending on how the child is growing, there'll be those that I bring every month, there'll be those I bring every 2nd month, and those who are growing well, I bring them on the 3rd month; and then, after two years, they come every three months for monitoring, and then every six months they come, they get de-worming, it's part of growth monitoring, because sometimes it's because of worm infestation, all the nutrients are eaten by the worms, then the child is becoming anaemic, then the growth will be altered or affected.

INV: Anything else?

PAR: OK, when they come, like I said before, you check the family background, how are they, are they coping financially, if not, you try to refer them to the social workers so that they can get financial assistance from the government.

INV: OK, that's also part of the programme, when you refer them to the social workers?

PAR: Hmm. When you find that the child is severely malnourished, you refer them to the nearest hospital.

INV: OK, so the referral system includes social worker, hospital, any other?

PAR: OK, at the hospital, they will be seen by the doctors, dieticians, then they will establish if there's anything wrong with the baby, if not they will refer to the dieticians to prescribe a suitable diet for the child.

INV: OK, thank you; and then how do you find the management of these children in the service?

PAR: Well, I'd say uh, we are trying, but there are still loopholes, sometimes you might refer them, it's a financial problem, that the child is not getting enough food, there's no-one working at home, you will refer to the social workers, but it is not guaranteed that they will get the grant or financial assistance, because they look at certain factors.

INV: So, when you talk about the grant, sorry to interrupt you, when you talk about the grant, you are actually talking about a grant other than the child care grant? Something more than the child care grant?

PAR: It depends, not so, sometimes you find that the child is with the mother, then in that case, the mother will get the child care grant, but sometimes, the mother leaves the child with the grandparents, and they go where-ever, sometimes they take the card that the child, that they should withdraw the money, sometimes they just abandon them with the grandmothers, in that case now they have to apply for foster care, so that they can get that grant for foster care.

INV: Oh, the *foster care* grant, OK I understand, thank you. So, is that the only loophole you can think of?

PAR: And then, another thing would be, sometimes you get food supplements, sometimes it's not there, you'll be getting milk, sometimes it's not there, that another thing that makes the parents angry, because, this time you give, the next time you don't give, it makes them very unhealthy, and you also, because there's nothing I can do, so milk supplement becomes a bit of a challenge, it's not frequently there, there'll be times when there's nothing, and at other times there'll be a lot of it, and the supplying of the milk is also a problem, because some parents now, they don't want to

take the initiative, as you can suggest that they do temporary jobs like washing, so that they can get a little bit of money so that you can buy food for the child, you know they become dependent on the milk, grant and supplement at the clinic.

INV: Please describe the normal activities involved in the care of malnourished children in the GMP, the activities involved

PAR: Umm, ok, it's growth monitoring, and you check if they are progressing, and then we also use the RTC, if the child is below 60% of the third percentile you have to refer the child, but if he's above that, you give health education to the mother on diet, what type of food should the child eat, and you also must consider the financial state of the parent, and the cultural, because I cannot tell a Xhosa woman to feed the child Mopani worms, though it's protein, what I can rather do is advise her on samp and beans because it is part of their staple diet, so also educate them on diet, and you will give them supplements when needed, and you will also give the de-worming medication and then they'll be coming on a monthly basis.

INV: OK, and then please tell me about the conditions under which the service is offered, just the prevailing conditions

PAR; Umm, I don't understand. Conditions, like health conditions...

INV: Just in general, like at the clinic, even the health conditions as you mentioned that accompany malnourishment, that kind of thing

PAR: OK, maybe I should tell you about the conditions in the....

INV: My interest is in the circumstances under which you are offering this service

PAR: Oh, ok, here in the clinic, it's done every day, every child that comes is weighed, and then you plot the weight on the RTC, and it then you are going to determine if the child is underweight; and presently I'm the only nurse who is doing EPI and growth monitoring, and sometimes it becomes a bit of a problem because eish, there's work overload, I can tell you they should be coming every month, but you end up, you know dividing them, though they should be coming monthly; there's also another challenge for me, umm the mothers are also not very co-operative, they believe that once the child has gotten the vaccines up to eighteen months, then there's no need to worry about the weight or anything else that the child might be affected by, that is also another thing and then they make it difficult for you, though you give health education, the minute you ask "mama, how do you feed this child?" she becomes very high and emotional, so you learn to have tact somehow, but it doesn't always work, so it's a little bit stressful; I know it's a sensitive issue to raise a child and then somebody else is questioning you about how you are raising the child you know but you do try, as you go along to see what works.

INV: Please tell me about your usual working day, what does it involve

PAR: I'm doing EPI and IMCI, so when I come in the morning I check the fridges, then prepare the cooler box for vaccinations and then I'll be seeing all the children who come for vaccinations all the children who are sick under five years and those who have come for growth monitoring.

INV: And then generally on average or roughly, how many malnourished children do you see on any day

PAR: Plus/minus 40.

INV: In one day?

PAR: Yes. The busiest days are Monday, Tuesday, and then Wednesday, Thursday there'll be thirty-something then twenty-nine by Friday, twenty-something by Friday; this is the whole clinic, not just the under-nourished; of these, three or four will be the ones with the weight problems; there'll be those who are underweight, then there will be those who are malnourished.

INV: Would you say there's a difference?

PAR: Yes. If they are underweight, you could classify them as, I'd say they are above 60% of the 3rd percentile so it's not severe malnutrition; the child is not gaining well according to the age or the growth curve is going down or becoming straight.

INV; So all those are malnourished even if not severely malnourished

PAR: You could say that, I don't agree.

INV: You don't? No, it's fine. And then what would you say are the resources or requirements for managing these children?

PAR: Resources, ok I think it would be continuous education to the mothers regarding proper feeding of the children, and then the mothers should bring the children everyday –not every day, but on the given dates for the growth monitoring and I would say that the staff should be knowledgeable on giving the health education; I think the person must know what education to give, like for instance what the child should eat to build up the weight quickly; and then another thing would to educate the mothers on home remedies; sat for instance the child should start having diarrhea, then immediately when the child has this, you should start giving salt and sugar solution, the child would not loose as much fluid, but the mother, to tell them on the danger signs, like if the child is not eating, is having diarrhea and vomiting, please rush to the clinic because that also can save us from having malnourished children; so if the mother can cone and the child is managed promptly then the duration of the illness is shortened because we know that the longer (interruption) and then even the staff should be taken for training, you must be knowledgeable, things change, and also a lot of new conditions arising now, like now HIV is rife, obviously a child

who is HIV positive and not taken care of will be malnourished, so we need to know about prevention of mother to child, and the high mortality rate, how to manage HIV positive infants; it's a good thing that the ARVs have now been rolled out, the child gets them as soon as they test positive we can send them straight to Harriet Shezi; and TB, testing for TB, as soon as the child is coughing for more than two weeks, they must be sent for TB screening so that if the TB test is positive, they must be started on TB treatment before the child becomes malnourished.

INV: So as far as the requirements are concerned, you are fine, it's the different programmes; and then what challenges have an impact on the service, in terms of delivery and effectiveness?

PAR: Eish. Shortage of staff and shortage of skilled staff because if every nurse was to be trained on IMCI, because it covers a whole lot of things, children would be properly, you would be able to see which one is at risk, you'd know which steps to take before a child complicates or anything like that, and if government was to employ more people that would help because it's only one person and overload of children because now you are trying to push the cue instead of giving the quality and also the government mustn't start programmes then when you are supposed to continue, like the provision of food parcels, sometimes it's there, sometimes it's not there, there's no consistency, that is also a problem; and the community, if we could teach the community to be proactive, not to always depend on a grant because they could also plant vegetables in his/her own yard and there's food on the table for all of them.

INV: [How] do you find the aspect of surveillance in the GMP, [that is] the stats collection, [the] reporting?

PAR: (laughter) I am always told that's of poor quality, every time we get reports that people are not reporting at all or under-reporting or over-reporting, so it's not reliable really; and sometimes you know what happens, even us nurses because it's a bit of a long process to survey malnourished children, you can see the child is malnourished but because of the press for time and the queue is long you 'll just, you will give the health education, whatever, but you will not enter him on the record, because you don't want to be asked 'did you follow up that client' next month, 'did you follow up, what was the result, so according to me it's not reliable, haai it's poor, that's what I think; those are the things, when I came here, I was never orientated, those are the things I learnt much later.

INV: And by then you'd seen how many children?

PAR: A lot, a lot of them.

INV: Anything you would like to add about stats, reporting?

PAR: What I could say is, if the employer knew, people, new people they should be taken for induction immediately for stats, whatever programmes that are being run at that particular facility so that people should know what is expected of them, don't hear it from the others, because I heard from the people that no, don't do this, do that it will cause trouble later, until I went to the meeting and saw how it should be done, so I don't know, but it's like that.

INV: And then, what are your views on the issue of child nutrition?

PAR: You know, I strongly believe, the sense of being a mother, we are losing that because a long time ago, our parents didn't have much money, but they could make means so that the child could eat and grow well ; they could plant vegetables, they went and house chores so that they could get money to buy food for the children, they were not totally dependant like it is nowadays, I don't know maybe it was the apartheid system and you could not depend on the government, but what I see now, people want things to come easy; they don't want to work, they don't want to try anything, I mean there's a lot of things that a person could do, even if he's unemployed; they could sell vegetables, they could plant them, they could do washings, and another problem would be teenage pregnancy, because teenage pregnancy, teenagers bring children into the world but they don't take responsibility they want to go and party and leave the children with the grandparents, the grandparents are old, they cannot take care of the child, so basically it goes back to health education, it means there's something wrong with us also, we're not doing our job properly, maybe if we were to give proper health education, people would listen, remove all the attitude, sometimes nurses can have an attitude, and would you listen to me if I talk with an attitude, you wouldn't, and people are scared to come to the clinics because of being harassed, and nurses are scared of giving health education because of being insulted by the public.

INV: Are there any areas of this service that need improvement?

PAR: Yeah, I think the whole service needs to be revised or revisited; some of these new ways, some of these new methods of how to monitor the growth in a ...(c7 10m25s) some new criteria need to be used, like ...(10m35s) follow the card exactly; like I believe personally I believe in health education more than anything else, maybe we should make programs for mothers to come and attend in-service training you know, for mothers, for the staff itself, but I don't think it's working, not 100% or even 50%, because the stats like I tell you, can be cooked, can be made up, sometimes they just come, yes, the documents are there, the papers are there, and the regulations and the procedures on what to do when the child comes, but do we do it? Do we do it really? I am sorry, I don't think it is being done properly, that's why I say they should revisit, come up with a new plan on how it should be implemented.

INV: So, what would be your recommendation to improve the service?

PAR: More staff. If we could be given more staff, I think it would be better, because what criteria they could use to even employ that staff, people should be employed because they love doing a thing, not because they want the money; you know, if we could go back to the old nursing, I was never there, but I remember how it used to be when we were still children but anyway, maybe it will get there someday because there is this thing that we must do home visits, I think that is going to help.

INV: So, home visits is something that you see could make an improvement?

PAR: I think so, because if you go there, you can look around, you can assess everybody and even the environment that they're living in, without hearing it from the client, because sometimes they say 'I don't have this, I don't have that' but when you go to the home, it's not like that, they've got all of that, so the home visits would help a great deal; ok, we are doing them, but not as often as we'd like to because of shortage of staff.

INV: And then, the last question is, what are your thoughts regarding training in terms of this GMP?

PAR: Yeah, I think intensive training should be done, because, usually it's one day, you go there for one day for growth monitoring, and there's a whole lot of things, sometimes people come with cards, they're charted wrongly, plotting of the weight is wrong, so you see, we still need education on that part; health education itself, because I think a lot can be done, it can prevent the condition from occurring, just with health education, it needs to be done frequently, you know how sometimes we forget these things, sometimes you do forget, and with, you know, so with frequent training that thing will be re-emphasised when repeated, and you, and if you practice what you're taught, you will know what is expected of you, so now, short-cuts don't work.

INV: If there's not anything else?

PAR: No, I'm fine.

INV: Thank you for your time, much appreciated.