

**Challenges of nurses in a Primary Health Care setting
regarding implementation of Integrated Management of
Childhood Illnesses**

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DECLARATION

I, Motlalepule Molemoeng Yvonne Maleshane, student number 11717785, declare that:

The dissertation with the title: **Challenges of nurses in a PHC setting regarding Implementation of Integrated Management of Childhood Illnesses** is my own work and that all the sources quoted have been indicated in the text and acknowledged by means of complete references.

- The study has been approved by the Ethics Committee of the North-West University (Potchefstroom Campus).
- The ethical standards of the North-West University (Potchefstroom Campus) have been considered during the conduction of the study.

MMY MALESHANE

November 2012

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ABSTRACT

Integrated Management of Childhood Illnesses (IMCI) is a strategy that was developed by the World Health Organisation (WHO) and the United Nations Children's Fund (UNICEF) to reduce the mortality and morbidity rate of children younger than 5 years and to improve the quality of life of these children. The reduction of child mortality and morbidity is one of the Millennium Developmental Goals (MDGs) as sub-Saharan Africa has a high child mortality and morbidity prevalence. The IMCI strategy has three components namely case management, the health system and the household and community component. This strategy was implemented internationally, including South Africa, where it is implemented within Primary Health Care (PHC) facilities.

The implementation of the IMCI strategy was introduced to the PHC environment of South Africa and aims to enhance the equity, accessibility, affordability and availability of health care to all South African citizens, with the focus in this study on the child younger than 5 years. The North West province started training the professional nurses and implemented IMCI in 1998. The Dr. Kenneth Kaunda district (one of the districts in North West Province) and with specific focus on the Matlosana sub-district identified challenges in the implementation of the IMCI strategy by professional nurses. Challenges such as a lack of trained staff, the short time frame available for consultation amidst an already overburdened clinic and the physical infrastructure of the PHC facilities are such examples.

The main aim of this research was to explore and gain insight and understanding in the challenges professional nurses working in PHC facilities face regarding the implementation of the IMCI strategy. A qualitative research design was used to conduct this study on daily work-life experiences of the professional nurses. Individual, semi-structured interviews were used as the method of data collection. The main question asked was: "What are the challenges faced by professional nurses in PHC facilities

regarding the implementation of the IMCI strategy?” Data saturation was reached after 18 professional nurses were interviewed (N=18). Digitally voice recorded interviews were transcribed and content analysis was conducted. The findings of this research suggest that the professional nurses in the PHC facilities indeed experienced challenges regarding IMCI implementation. The main themes that emerged were challenges regarding the organisation and service delivery; challenges specific to the implementation of the IMCI strategy and also challenges external to the clinic that impacted directly on the IMCI strategy implementation. The findings were discussed with literature integration.

From the research results and conclusions, the researcher compiled recommendations for nursing education, nursing research, and community health practice.

Key words: Integrated Management of Childhood Illnesses (IMCI strategy), implementation, Primary Health Care, professional nurses, challenges.

OPSOMMING

Geïntegreerde Bestuur van Kindersiektes (GBKS) (*Integrated Management of Childhood Illnesses [IMCI]*) is 'n strategie wat deur die Wêreld Gesondheidsorganisasie (WGO) en die Verenigde Nasies Kinderfonds (UNICEF) ontwikkel is om die sterftesyfer en morbiditeitsyfer in kinders jonger as 5 jaar te verlaag en om hierdie kinders se lewenskwaliteit te verbeter. Die verlaging van die kindersterftesyfer en morbiditeitssyfer is een van die Millennium Ontwikkelingsdoelwitte aangesien sub-Sahara Afrika 'n hoë voorkoms van sterftes en morbiditeit het. Die GBKS-strategie bestaan uit drie komponente naamlik gevallestuur, die gesondheidstelsel asook die huishouding- en gemeenskapskomponent. Die strategie is internasionaal geïmplementeer, en in Suid-Afrika vind dit uitdrukking binne die Primêre Gesondheidsorgsektor.

Die GBKS-strategie is in Suid-Afrika by die PGS omgewing ingesluit met die doel om die gelykwaardigheid, toeganklikheid, bekostigbaarheid en beskikbaarheid van gesondheidsorg aan alle Suid-Afrikaners te verhoog. Die Noordwesprovinsie het in 1998 begin om professionele verpleegkundiges in die strategie op te lei en dit te implementeer. Die Dr. Kenneth Kaunda distrik (een van die distrikte in die Noordwesprovinsie) is geïdentifiseer vir hierdie studie oor die implementering van die GBKS-strategie deur professionele verpleegkundiges, met spesiale klem op die Matlosana sub-distrik. Uitdagings soos die tekort aan opgeleide personeel, die gebrek aan tyd beskikbaar vir konsultasie binne alreeds oorlaaide klinieke en die fisiese infrastruktuur van die PGS fasiliteite is voorbeelde hiervan.

Die hoofdoel van hierdie navorsing is om die uitdagings te ondersoek en sodoende insig te verkry en te verstaan wat die uitdagings is waarmee professionele verpleegkundiges wat in PGS fasiliteite werk gekonfronteer word aangaande die GBKS-strategie se implementering. 'n Kwalitatiewe navorsingsontwerp is gebruik vir die studie om die daaglikse belewenis van die professionele verpleegkundige in die werksomgewing te

ondersoek. Individuele, semi-gestruktureerde onderhoude is gebruik as die metode van data-insameling. Die sentrale vraag was: “Wat is die uitdagings wat professionele verpleegkundiges in die gesig staar in PGS fasiliteite met betrekking tot die implementering van die GBKS-strategie?” Datasaturasie is bereik na onderhoude met 18 professionele verpleegkundiges (N=18). Digitale klankopnames van die onderhoude is getranskribeer en ‘n inhoudsanalise is gedoen. Die bevindinge van die navorsing wys dat professionele verpleegkundiges in PGS fasiliteite inderdaad uitdagings met betrekking tot GBKS implementasie ervaar. Die hoofemas wat aan die lig gekom het is uitdagings met betrekking tot organisering en dienslewering; uitdagings spesifiek tot die implementering van die GBKS strategie en ook uitdagings van eksterne aard wat ‘n direkte invloed het op die GBKS strategie. Die bevindinge is bespreek saam met ‘n literatuurintegrasie.

Die navorser het aanbevelings geformuleer uit die bevindinge van die studie vir verpleegonderrig, verpleegnavorsing en gemeenskapsgesondheidsdienste.

Sleutelwoorde: Geintegreerde Bestuur van Kindersiektes (Integrated Management of Childhood Illnesses - IMCI strategy), implementering, Primêre Gesondheidsorg, professionele verpleegsters, uitdagings.

ABBREVIATIONS

AIDS	Acquired immunodeficiency syndrome
ANC	African National Congress
CHC	Community Health Centre
DoH	Department of Health
EC	Ethics Committee
EDL	Essential Drug List
HATC	Health Assessment Treatment and Care
HIV	Human immunodeficiency virus
IMCI	Integrate Management of Childhood Illnesses
MDG	Millennium Development Goals
MRC	Medical Research Council
NEIs	Nursing Education Institutions
NHI	National Health Insurance
NWU	North West University
PHC	Primary Health Care
SA	South Africa
SANC	South African Nursing Council
UNICEF	United Nation's Children's Fund
WHO	World Health Organisation

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CHAPTER 1

ORIENTATION TO THE STUDY

1.1 INTRODUCTION AND BACKGROUND

South Africa experiences high mortality and morbidity rates of children younger than 5 years due to illnesses like diarrhoea, malnutrition and respiratory infections. Globally, almost 73% of children younger than 5 years that die annually, die from diseases that can be prevented (Bryce *et al.*, 2005:1150). Following this statement the World Health Statistics of the World Health Organisation (WHO, 2009b:35) reported that the incidence of these mortality rates is rising in the sub-Saharan Africa. In South Africa (SA) the mortality rate for children younger than 5 years are estimated at 59 per thousand life births. The gap between what can be done to reduce child mortality and what is being done is increasing (Bryce *et al.*, 2003:159).

At the World Summit for Children in 1990 the government of SA committed itself to reduce the mortality rate of children younger than 5 years by signing the Millennium Declaration. The eight Millennium Development Goals (MDGs) were derived from this Declaration (Moon, 2007:1). WHO further explained that from these MDGs, goal four aims to reduce the child mortality rate by two thirds by 2015. Moon (2007:18) further clarifies that for a reduction in the mortality rate of children to occur; an integrated approach to child health is needed, aided by activities to support the most vulnerable children. Integrated Management of Childhood Illnesses is one of the strategies that focus on the main areas of improvement (Moon, 2007:34). Shoo (2007:62) further explains that if goal 4 of the MDGs was to be achieved, Africa has the challenge of narrowing the child mortality rate and as indicated, the gap between the child mortality rate and the interventions to decrease this rate. He further points out that opportunities exist to scale up the child survival intervention with the use of the Integrated Management of Childhood Illnesses (IMCI) strategy. The IMCI strategy was developed by WHO and United Nations Children's Fund (UNICEF) in the early 1990's to deal more

effectively and efficiently with the main causes of mortality like malnutrition, malaria, respiratory infections, diarrhoea, including HIV (Human Immune deficiency Virus) (Chopra *et al.*, 2004:397; Kibel & Wagstaff, 2005:320). The IMCI strategy is furthermore based on human rights in an endeavour to improve the health of all children younger than 5 by addressing knowledge gaps, skills and community practices regarding children's health (Ketsela *et al.*, 2005: 92).

In South Africa the IMCI strategy is utilised by doctors, nurses and other health care professionals who consult sick children and infants (WHO, 2009a:5). These implementers of the IMCI strategy in children aim to use it as a protocol for paediatric consultation in order to avoid missing possible diseases in children (Saloojee, 2007:172). The IMCI strategy is one of the strategies that will accelerate progress in child survival and extend services to the most vulnerable children (UNICEF, 2007:34). It was adopted in South Africa as the golden standard for the delivery of child health services to improve child survival (Horwood *et al.*, 2009b:313). Its development ensured support and guidance to nurses working in primary health care (PHC) facilities to do a comprehensive assessment of the child younger than 5 years, including the nutritional and the immunisation status, with the focus on the problem that the child presents with. The mother, care giver or significant other accompanying the child to the PHC facility is involved in the whole process (Kibel & Wagstaff, 2005:321). The identification and management of diseases like HIV/AIDS, tuberculosis and malaria is also challenging for the nurses working in a PHC facility (Horwood *et al.*, 2009b:313) and the early detection of these diseases is possible when the IMCI strategy is properly practiced in the PHC facilities for prompt treatment or referral.

With the integration of the IMCI strategy in the health systems of South Africa, a transformation from a medical model and hospital focused service to a PHC philosophy unfolded (ANC, 1994:21). Health services can be seen as a system which includes the IMCI strategy as part of PHC services consisting of organisations, facilities, technologies and people [professional nurses] providing services designed to promote health and prevent or cure illness [of the child younger than five years]. The health system

framework follows the elements of all systems. The first element of the system is the input, which refers to the professional nurse who implements care of the child younger than five years. The second element is the process, which refers to the actions that flow from the implementation of the IMCI strategy. The last component is the outcome, which refers to the effect of the IMCI on the health of the child younger than five years (Joubert & Ehrlich, 2007:306-307). PHC, essential health care made universally accessible and affordable to individuals (Bouwer *et al.*, 2003:11), forms part of the health systems in South Africa. It furthermore entails a comprehensive service that involves not only curative but also promotive, preventive and rehabilitative aspects. When PHC is implemented certain principles apply and should be in place in all PHC facilities for it to be successful (Dennill *et al.*, 1999: 6; Hattingh *et al.*, 2006: 64) namely:

- Equity** Community members (child younger than 5 years) should have equal access to basic health care, which includes IMCI and social services.
- Accessibility** Health services should be within reach of all community members (child younger than 5 years), not more than five kilometers from where the child stays. It also refers to the communication that should be in the language of the child's preference.
- Affordability** Health services, including IMCI, should be affordable. No child younger than 5 should be denied access to any PHC facility due to a lack of money. Services are provided free of charge to children younger than 5 years and parents should be encouraged to take their children to the PHC facility for preventive, promotive and curative services at any given time.
- Availability** Sufficient and appropriate health services should be available at the time that there is a need for service delivery. Primary health care facilities provide comprehensive health services, including a wide range of basic services called a "supermarket approach". This type of health care is more efficient and available to the child younger than 5 years, who can then attend one PHC facility to obtain several services applicable to his or her health need.

It is within this PHC philosophy and its associated challenges that professional nurses have to implement the IMCI strategy to all children younger than 5 years. Training of health care professionals in the IMCI strategy was launched in South Africa in 1998 and all professional nurses working in PHC facilities received 11 days training on the strategy, which includes both initial skill acquisition and skill reinforcement (WHO, 1999). The IMCI course is designed to help the professional nurse in the PHC facilities (first-level health facilities) to acquire new skills to manage sick children younger than 5 years more effectively (Tulloch, 1999:18). Besides qualified, professional health care personnel being trained at health care facilities, nursing schools based in universities and nursing colleges have integrated the IMCI strategy into their curriculums. The health care professionals, especially the nurses and doctors working in PHC facilities, constitute the major workforce that renders care to children younger than and should therefore be trained and skilled in the implementation of the IMCI strategy (WHO & UNICEF, 2005:5). The IMCI strategy consists of three components as stated by Amaral *et al.* (2004:209) and the WHO (2009a). Table 1.1 below offers an overview and description of each component.

Table 1.1: Three components of IMCI as outlined by WHO (2009a) and Victora *et al.* (2006)

IMCI Component	Description
Case management component	This component aims to improve the skills of nurses working in PHC facilities, resulting not only in performance improvement, but also higher quality of care. The skills of all health workers are improved through the training of nurses in the PHC facilities. The training referred to is based on a set of algorithms that guide the nurse through a process of assessing the sick child younger than 5 years, classifying the illness and providing appropriate treatment to the child and education to the mother, care giver and/or significant other (Victora <i>et al.</i> , 2006:1).
Health systems component	PHC facilities should be staffed with sufficient health workers who have the right skills and motivation (WHO, 2009a). It focuses on supporting improved case management like the availability of drugs, means for the child younger than 5 years, which includes referrals, transfers, transport and supervision of the health care personnel that strengthens the functions of the PHC facility.

Household and community component	Community-/home-based care addresses key practices like nurturing of children in the home or in the community with the main aim of creating an environment in the home that is conducive to the optimal well-being of the child, and to increase community involvement and awareness. This component addresses breastfeeding, complementary feeds, personal hygiene, environmental hygiene, immunisation and home treatment of infections (Victora <i>et al.</i> , 2006:3).
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The core of the IMCI strategy is integrated case management of the most common childhood problems, with a focus on the most important causes of death (Horwood *et al.*, 2009c:1; WHO, 2005). The clinical guidelines are based on expert clinical opinion and are designed in two packages for the management of sick children, from birth to 2 months and 2 months up to 5 years. The guidelines promote evidence-based assessment and management by interpreting signs that indicate severe disease and considering a child's nutritional, immunisation and feeding status (WHO & UNICEF, 2005:x). In addition, the guidelines teach parents how to care for a child at home; counselling parents to solve feeding problems and advising parents about when to return to a health facility (WHO & UNICEF, 2009:3). The guidelines also include recommendations for checking the parents' understanding of the advice given and for showing parents how to administer the first dosage of treatment (WHO & UNICEF, 2005; Hoorwood *et al.*, 2009c:1; Coovadia & Wittenberg, 2006:71). The Department of Health (DoH) provides a full set of materials adapted from the WHO on IMCI training that includes chart booklets, exercise books, different modules and video tapes to equip nurses with the correct information on the IMCI strategy (WHO, 2009).

The complete IMCI case management process involves the following elements (WHO & UNICEF, 2005; WHO & UNICEF, 2009:4):

- **Assessment** of the child younger than 5: The assessment follows a process of checking first for danger signs (or possible bacterial infection in a young infant), followed by taking the history about common conditions, then the physical and social examining the child, including nutritional and immunisation status. Assessment also includes checking the child for other health problems.

- The professional nurses working in a PHC facility **classify** a child's illnesses using a colour-coded triage system. This means **making a decision on the severity of the illness**. Many children present with more than one condition and therefore each illness is classified according to whether it requires:
 - urgent pre-referral treatment and referral (classification in red);
 - specific medical treatment and advice (classification in yellow); and
 - simple advice on home management (classification in green).
- After classifying all existing conditions, the next step implies identifying **the appropriate treatment** for the child. If a child requires urgent referral, the professional nurse should give essential treatment before the patient is transferred. If a child needs treatment at home, an integrated treatment plan for the child should be developed and the first dose of drugs should be given at the clinic. If a child has to be immunised, this should be done in the PHC facility. The chart used by the professional nurses recommends the specific **treatment for each classification**.
- Assessment of the child's nutritional status follows, including the assessment of breastfeeding practices, with **counseling** of the mother to advise on any evident feeding problems. During counseling the professional nurse should also consider the mother's own health.
- When a child is brought back to the clinic for **follow-up** as requested by the professional nurse, the professional nurse should re-assess the child for new problems.

The brief outlay of the IMCI case management process above gives an overview of what the content of the IMCI strategy should entail, whereas the following paragraphs give a historical overview regarding IMCI in the area included in the study.

Integrated Management of Childhood Illnesses training commenced in 1998 in the Matlosana sub-district, North-West Province. According to statistics there are currently 141 professional nurses within the Matlosana sub-district positioned within PHC facilities. Of these 141 professional nurses, 119 are IMCI trained. The rest are not IMCI

trained, including contractual workers (DoH, Matlosana sub-district, 2012). Table 1.2 below is a summary of the professional nurses' IMCI profile.

Table 1.2: Statistics of professional nurses in the Matlosana sub-district indicating their IMCI profile (DoH, Matlosana sub-district, 2012)

PHC facility	IMCI trained	Not IMCI trained	Total professional nurses
Klerksdorp	48	7	55
Orkney	27	7	34
Stilfontein	29	4	33
Hartebeesfontein	15	4	19
Total	119	22	141

From table 1.2 it is clear that from the total of 141 professional nurses, 15% lack IMCI training. This sub-district is one of the places where parents have put trust in the nurses. This is shown by PHC facilities that are packed daily. Approximately 205 children younger than 5 years are seen on a daily basis to seek proper health care (DoH, 2012). The researcher spends much time in the clinics accompanying and assessing the nursing learners in IMCI, and according to her observation most of the children brought to the clinics are malnourished due to unemployment and have HIV related diseases. In addition, within the Matlosana sub-district, most of the mothers and their children attending the PHC facilities are of low socio-economic status, poverty stricken and illiterate. Children born into a poor environment are often exposed to contaminated water and poor housing, which most likely can result in malnourishment and infectious diseases, as stated in the Millennium Development Goals (MDG) (Moon, 2007:17). Furthermore, the MDG clearly states that there is a link between poverty and child death. This confirms the observation of the researcher and the findings of Moon (2007) in the MDG. Kibel and Wagstaff (2005:11) agree with Moon when they identify the triad of diseases, diarrhoea, malnutrition and infections, as the leading causes of death. An integrated approach was indicated to target these common childhood illnesses, resulting in the IMCI strategy.

There are several constraints in the health care system that need intervention so that a reduction of two thirds in the mortality rate of children younger than 5 years as one of the MDG's can be reached by 2015 (UNICEF, 2007:2). Nurses in PHC facilities might achieve this objective if they move beyond addressing a single disease to addressing the overall health and well-being of the child (WHO & UNICEF, 2001:2) and if they adhere to the IMCI strategy and involve the parents in the care of their children. This is attainable when considering that the IMCI strategy focuses on the main areas of improvement and accelerates progress in children's survival by extending services and lifesaving interventions to sick children younger than 5 years (Moon, 2007:34; UNICEF, 2007:34).

1.2 PROBLEM STATEMENT

From the background formulated above it is clear that the IMCI strategy is necessary because it does not only improve the quality of child health care, but also contributes towards making services more affordable (Zhang *et al.*, 2007:682) within a PHC approach. IMCI training is essential but although most of the nurses working in PHC facilities could be IMCI trained, there might be other challenges impacting on the effective implementation of the IMCI strategy. Reasons include shortage of staff and other job-related factors such as a high workload and dissatisfaction with regard to salaries (Mariani *et al.*, 2003:10-13). In addition Bryce *et al.* (2005:11) state that the staff turnover gives rise to the serious problem, preventing sufficient coverage in terms of the implementation of the IMCI strategy. Other problems identified by Vhurumo and Davhana-Maselesele (2009:64) include the lack of IMCI training materials, shortage of IMCI-related medication and the lack of support from the supervisors. It was furthermore mentioned by Horwood *et al.* (2009c:5) that one of the barriers to implementing the IMCI strategy successfully is when the consultation time takes longer than expected and that mothers are dissatisfied when they receive health education as opposed to the expected treatment. This depends on the classification in the IMCI strategy, where the mother might for instance be taught how to soothe a child's throat and relieve the child's cough, rather than to receive medical treatment.

The researcher is a nursing lecturer and also responsible for clinical accompaniment of nursing learners (under- and post graduate diploma) in PHC facilities where IMCI is implemented as a strategy to combat the high morbidity and mortality rate of children younger than 5 years. During this involvement as a lecturer it became apparent that the IMCI strategy is not implemented according to the guidelines set by the WHO and UNICEF in the PHC facilities (WHO & UNICEF, 2005). The learners also add to the researcher's concern when they report that nurses working in the PHC facilities do not adhere to the principles of the IMCI strategy according to what they were taught in the classroom. This raises some suspicion as to the quality and efficiency of the mentoring of the nursing learners by professional nurses in the clinical field, and also by setting an incorrect example regarding the implementation of the IMCI in the PHC facilities.

Derived from the information above, the main question to ask is why professional nurses do not adhere to the implementation strategies of the IMCI in their various PHC facilities. It is crucial to answer this question in order to make recommendations related to nursing practice, research and education on the implementation and enhancement of the IMCI strategy in order to reduce the mortality and morbidity rates of children younger than 5 years and to improve their quality of life. In an attempt to answer the overall question the following question guides this research:

What are the challenges professional nurses who work in PHC facilities face with regard to the implementation of the IMCI strategy?

1.3 AIM AND OBJECTIVE OF THE STUDY

The aim and objectives were formulated based on the research question and the information expounded in the literature as outlined in the introduction, background and problem statement. The main aim of this research is to explore and gain insight into and understanding of why the professional nurses working in PHC facilities do not implement IMCI strategies.

The following objective will aid in accomplishing the mentioned aim of the study:

- To explore and describe the challenges facing professional nurses working in PHC facilities regarding the implementation of the IMCI strategy.

1.4. RESEARCHER'S ASSUMPTIONS

The researcher's assumptions (also referred to as perspectives) can be divided into the meta-theoretical, theoretical and the methodological perspectives. These different perspectives are declared below in an endeavour to clarify what thoughts guided the researcher during this study.

1.4.1 Meta-theoretical assumptions

A paradigm is a world view that comprises what a person believes in and how it influences the person's way of thinking (Polit & Beck, 2006:13; Botma *et al.*, 2010:186). It is a researcher's view of reality that should be declared to the reader as this view of reality infiltrates every aspect of research. The researcher will approach this study within a specific paradigm or belief that guides the researcher. The meta-theoretical, theoretical and methodological assumptions of the researcher follow below.

The researcher's meta-theoretical assumptions are directed by a Christian perspective where God is central to the essence and existence of living beings, including human beings. The following meta-theoretical assumptions are declared below:

1.4.1.1 Human being

From a Christian perspective a human being is a holistic being created in the image of God (Bible, 1995:2). A human being is viewed as a whole person that consists of the dimensions of body, mind and spirit and has been created to serve God. The human being is created by God in His image. For this reason one should have respect for His creation and this implies that creation should be preserved. The human being in this study refers to the child from birth up to 5 years and the professional nurse in the PHC facilities who renders a service by assessing, classifying and treating the child using the IMCI strategy. The child younger than 5 years has the right to be healthy and to receive

treatment when ill. The professional nurse has the responsibility to preserve the child's health as far as possible.

1.4.1.2 Environment

The environment is also created by God and should be preserved. Within this created environment the physical, social and spiritual dimensions interact with each other. The environment has been created for man to serve God. In this study, the environment is the PHC facilities in the Matlosana sub-district in the North West Province where children younger than 5 years are assessed, classified, treated and referred by professional nurses according to the IMCI strategy. It is within this environment that challenges are faced by professional nurses in the implementation of the IMCI strategy.

1.4.1.3 Nursing

According to the Nursing Act (No.33 of 2005) nursing is a caring profession practised by a person registered under section 31. Nursing is a process between the nurse and the patient (the child younger than 5 years) whereby there is an interactive, interpersonal nurse-patient relationship. Nursing is a goal directed service to assist individuals, the family and community to promote, maintain and restore health and gain strength from God as the Creator. The nurse is there to nurture, to facilitate this interaction and accept the child unconditionally as the child and the nurse are both created in the image of God. The professional nurse needs to integrate a cognitive, psychological and affective process through implementing the IMCI strategy to assist the child younger than 5 years in gaining better health so that the mortality and morbidity rates are reduced.

1.4.1.4 Health

The researcher agrees with the WHO in Dreyer *et al.* (2004:7) that health is a state of physical, mental and social well-being, not merely the absence of disease and infirmity. God creates every child in a healthy state, not in a state of ill health. Professional nurses in PHC facilities apply the IMCI strategy to the children younger than 5 years in need of care. They assess, classify, treat and refer these children until optimal health is reached.

1.4.2 Theoretical assumptions

In this research the IMCI strategy serves as the theoretical framework. It forms the basis of the study and will be integrated throughout. The components of the IMCI strategy were described in the introduction and background for a clear understanding of the problem statement and the focus of the research. Refer to 1.4.2.2 for a definition of the IMCI strategy as applied to this research. The theoretical assumptions also include the central theoretical statement and the definitions of concepts central to this research as discussed below.

1.4.2.1 Central theoretical statement

The exploration and description of the challenges impacting on the implementation of the IMCI strategy by professional nurses working in PHC facilities in the Matlosana sub-district can lead to a better understanding of why the strategy is not fully implemented. Answers found in the quest will result in recommendations for the nursing practice, -research and -education in an endeavour to enhance the implementation of the IMCI strategy and improve the quality of the health care of children younger than 5 years.

1.4.2.2 Definition of concepts

In order to ensure consensus in the utilisation of concepts in this research, the following paragraphs offer a clarification of terms.

- **Under-five mortality rate**

This refers to the number of deaths in children younger than five years of age divided by the number of live births (expressed as a rate per 1000) in a given year (Dreyer *et al.*, 2004:95; Joubert & Ehrlich, 2007:28). The efficiency of the IMCI strategy is amongst others visible in the child mortality rate and therefore it is an important term in this study. The MDG number 4 aims for a two-thirds reduction in deaths among children younger than 5 years by 2015 (Moon, 2007: 17).

- **Child morbidity**

Child morbidity refers to the occurrence of a specific health problem in children that may or may not result in death (Dreyer *et al.*, 2004:95). Morbidity refers to the occurrence of disease and is of great importance in demography of an area (Joubert & Ehrlich, 2007:27). An increase in adherence to the IMCI strategy by professional nurses working in the PHC facilities will result in a decrease in the morbidity rate of children younger than 5 years.

- **Child health**

Child health is a state of well-being and effective as well as satisfactory functioning of a child and his or her environment in all developmental stages (Kibel & Wagstaff, 2005:4). In this study child health and well-being is a priority because the argument is that the child mortality rate can be lowered and the health of the child improved through adherence to the IMCI strategy by the professional nurses.

- **Integrated Management of Childhood Illnesses (IMCI)**

IMCI is an integrated approach to child health that aims to reduce mortality and morbidity rates to promote improved growth and development of children younger than 5 years. It includes both preventive and curative elements (WHO, 2009:1) that should be implemented in the PHC facilities as part of the health system. The adherence to the implementation of the IMCI strategy in the PHC facilities is central to this study.

- **Primary Health Care (PHC)**

In South Africa PHC refers to “essential health care based on practical, scientifically sound and social acceptable methods and technology made universally accessible to individuals and families in the community at a cost that the community and country can afford” (Bouwer *et al.*, 2003:11). PHC involves levels of prevention that apply to IMCI, namely primordial prevention that refer to health promotion principles; primary prevention, that is preventing a health problem before it even starts; secondary

prevention, that is preventing a problem from getting worse; and tertiary prevention that is preventing the problem from causing disability (Joubert & Ehrlich, 2007:307).

- **Professional Nurse**

According to the South African Nursing Council (SANC) a nurse is a person registered under section 31(a) of the Nursing Act (33/2005). However, a professional nurse is a person who is qualified and competent to practice comprehensive nursing and who is capable of being responsible and accountable for her omissions or her actions. In this study a professional nurse is a registered nurse working in a PHC facility that has or has not undergone an IMCI case management course and is responsible to adhere to the IMCI strategy and implement it. In the remainder of this study, the term “nurse” refers to a professional nurse and the direct health care professional that implements the IMCI strategy in PHC facilities.

- **PHC facility**

According to de Haan (1997:7) a PHC facility is a comprehensive health care system that is an integrated and co-ordinated system that has preventive, promotive and curative components. For the purpose of this study a PHC facility refers to the four Health Care Centres purposively selected from the 16 facilities in the Matlosana sub-district that provide comprehensive health care services. The study will be conducted and data will be collected in these four facilities. These health care centres are all open for 24 hours each day rendering comprehensive PHC, including the IMCI strategy.

- **Challenge**

According to the Oxford Advanced Learner’s Dictionary (2010:48) a challenge is a demanding task or a situation that is difficult to manage. In this study the IMCI strategy is a task that the professional nurses have to implement at the PHC facilities. It was developed by the WHO and adopted by the South African health system to decrease the morbidity and mortality rates of children younger than 5 years. The aim of this study is to explore the challenges faced by the professional nurses to implement the IMCI strategy.

- **Adherence**

To adhere is to behave according to a particular rule or to follow a particular set of beliefs (Oxford Dictionary, 2006:17). If a nurse working in a PHC facility adheres to the implementation of the IMCI strategy, it implies that the professional nurse follows the process of assessment, classification, treatment and follow-up of the child under five years.

1.4.3 Methodological assumptions

Methodological assumptions explain what the researcher believes good science practice is (Botes, 1995:6; Botma *et al.*, 2010:188). The research process is guided by the research model of Botes (1995:5-8). This model presents the activities of nursing on three levels namely the nursing practice, the methodology adapted for the study and the meta-theoretical assumptions.

The first level comprises nursing practice, which entails what is happening in real life situations. This study explores and describes the challenges faced by PHC nurses in the clinical facilities regarding the IMCI implementation. The children younger than 5 years and the professional nurses in the PHC facilities are the main focus in this research. The second level represents the methodology adapted for the research (Botes, 1995:6), which is the research process used as found suitable for the research problem identified from the first order. The researcher interacts with the participant to gather data on the challenges pertaining to the adherence to the IMCI strategy in PHC facilities. Consequently recommendations are formulated for nursing practice, -education and -research. The research decisions direct the research design, which included the method of sampling, data collection, data analysis, ethical considerations and trustworthiness.

The meta-theoretical assumptions of the researcher become relevant at the third level (Botes, 1995:5-8) and these were described in 1.4.1. The three orders interact with one another. The research model by Botes (1995) has a functional perspective implying that actions within all three orders are diverted back to the nursing practice. In this study the nursing practice is the implementation of the IMCI strategy by professional nurses in

PHC facilities in order to decrease the morbidity and mortality rates of children younger than 5 years.

1.5 RESEARCH DESIGN AND METHOD

An explanation of the research design and method is offered below and a detailed description of the methodology follows in chapter 2.

1.5.1 Research design

The research design refers to the logical strategy for gathering knowledge (de Vos *et al.*, 2004:391). To meet the aim and objectives of this study a qualitative design was utilised in order to explore and describe the challenges faced by nurses in PHC facilities regarding IMCI implementation. A qualitative design is appropriate as the researcher wanted to describe the phenomenon within the appropriate context (Babbie *et al.*, 2004:278). The researcher decided on this design for its usefulness for researching the “humanity of health care”, and to investigate how and why the existing services (the IMCI strategy) are ineffective and inefficient (Joubert & Ehrlich, 2007:311). The context of the research is the four PHC facilities in the Matlosana sub-district in the North West Province.

1.5.2 RESEARCH METHOD

A brief description of the research method is provided in the subsequent paragraphs and attention is granted to data collection including population, sampling, sample and data analysis.

1.5.2.1 Population

The population refers to the entire group of persons that meets the criteria the researcher is interested in investigating (Brink, 2006: 23). The population in this study comprise of all the professional nurses implementing the IMCI strategy to children younger than 5 years who work in PHC facilities in the Matlosana sub-district in the North West Province.

1.5.2.2 Sampling Method

A non-probable, purposive sampling method was used in this study (Botma *et al.*, 2010:126). The researcher planned to select the participants purposively according to the following inclusion criteria:

- professional nurses who currently work in a PHC facility in the Matlosana sub-district;
- have worked at least one year in a PHC facility after qualifying as a professional nurse;
- must have been registered with the South African Nursing Council (SANC) as a professional nurse;
- should be able to understand and speak English because the interviews have been conducted in English; and
- should be willing to participate voluntarily.

1.5.2.3 Sampling size

The sample size is the number of participants participating in a study based on the specific information needs (Polit & Beck, 2006:273). The number of participants (N=18) was regarded as adequate once no new information was obtained and redundancy and saturation of data was achieved (Burns & Grove, 2009:361; Polit & Beck, 2006:273). The data collection continued until enough professional nurses were interviewed for a full and rich description of their perceptions of the challenges facing the professional nurses in the implementation of IMCI in PHC facilities.

1.5.2.4 Data collection

Data collection refers to pieces of information that the researcher gathers in a study (Polit & Beck, 2006:36). The purpose of this research was explained to the management of all PHC facilities in the Matlosana sub-district in the North West Province to gain co-

operation. The detailed outline of the role of the researcher during data collection follows in Chapter 2. A brief description follows below.

1.5.2.5 Role of the researcher

The researcher's role is to apply and obtain permission to conduct the study and to gain entry to the setting (Creswell, 2003:184). The researcher applied for permission to conduct the study, which was obtained from the Ethical Committee of the North-West University (Potchefstroom Campus) (see Addendum A), the Director of Health in the Matlosana sub-district (see Addendum D) and the Provincial Office of the North West Province (see Addendum E). The researcher recruited the participants, made appointments with them to obtain permission to conduct the interviews.

1.5.2.6 Method of data collection

Data collection took place by means of individual interviews to explore and describe the challenges of nurses in PHC facilities regarding IMCI implementation. The interviews were conducted with professional nurses in the PHC facilities who render care to children younger than 5 years and met the inclusion criteria. The subsequent questions were guided by the initial response (Polit & Beck, 2006:291). The interview process was explained beforehand and only commenced after participants gave voluntary consent. Field notes were taken during the interview as explained to the participants. These notes included descriptive, reflective and personal notes (Polit & Beck, 2006:307). A thorough explanation of the field notes will appear in chapter 2 (Addendum H).

1.5.2.7 Data analysis

Data collection and analysis were done simultaneously with data captured on voice recorders. Field notes and transcripts were analysed, categorised and coded (Brink, 2006:184). In this research data analysis was conducted by means of content analysis. Content analysis was used to analyse qualitative responses to open ended questions in interviews (Maree, 2007:101). During content analysis after data was collected from

participants, the following steps were used (Terre Blanche, Durheim and Painter, 2006:321-326):

- Step 1: Familiarisation and immersion;
- Step 2: Developing themes;
- Step 3: Coding;
- Step 4: Elaboration;
- Step 5: Interpretation and checking.

These categories were subsequently finalised by going through the table again, and the spoken words were translated into scientific language. A meeting was scheduled between the researcher and co-coder after data analysis had been conducted. Consensus between the researcher and the co-coder resulted in formulating the main categories and sub-categories with regard to the challenges faced by professional nurses to implement the IMCI strategy in PHC facilities.

1.5.2.8 Literature integration

Literature integration was conducted to confirm or contrast research results with the relevant literature and other existing research findings. New insights from this research were highlighted (Creswell, 2009:31). The purpose of the literature control in this study was to explore the challenges of nurses in the PHC facilities regarding IMCI implementation by comparing the collected data with relevant literature. Literature was drawn from different databases as indicated in Chapter 2.

1.6 RIGOUR

The principles of trustworthiness as described by Lincoln and Guba (1985:290) were employed to this research to enhance the rigour of the qualitative research. These principles included strategies to enhance the credibility, transferability, dependability and confirmability and are discussed in detail in Chapter 2.

1.7 ETHICAL CONSIDERATIONS

Babbie (2007:312) refers to research ethics as a concept associated with morality and conforming to the standards of conduct of a particular profession. In this study the researcher acknowledges the importance to adhere to ethical principles as human

beings are the participants. The ethical considerations pertain to the protection of participants and are based on human rights (Brink, 2006:31). The following ethical considerations applied during this study:

- **Beneficence**

Beneficence is the protection of participants from harm and discomfort (Brink, 2006:32; Polit & Beck, 2006:87). The participants in this study were protected as a full explanation of the study was given to the professional nurses in PHC facilities before obtaining informed consent for data collection. If there was any form of discomfort or harm during data collection, the researcher was prepared to terminate the session.

- **Respect for human dignity**

Participants have the right to be respected and to be given a choice whether to participate in the study or not (Brink, 2006:32; Polit & Beck, 2006:87). The researcher gave the participants adequate information about the study and explained to them that they have a choice to participate or not. Appointments were secured by the researcher and the participants to show respect and they were allowed to ask for clarification if they were unsure of something.

- **Permission to conduct the study**

The following processes were followed and documents provided with regard to permission to conduct this research:

- The study was approved by the Ethics Committee of the North-West University of NWU, certificate number NWU-0058-11-A1) (Addendum A).
- Permission to conduct the study was also obtained from the Department of Health in North West Provincial Health Department (Addendum E).
- Permission to use the clinical facilities was obtained from the PHC management of Matlosana sub-district (Addendum D).

- The participants gave voluntary consent after thorough explanation of the purpose of research and methods and procedures that will be followed (Addendum F).

A detailed description of the application of the ethical principles will be described in Chapter 2.

1.8 CHAPTER OUTLINE

Chapter 1: Introduction and overview.

Chapter 2: Research methodology.

Chapter 3: Research results and literature integration.

Chapter 4: Evaluation of the study, limitations and recommendations.

1.9 CONCLUSION

In chapter 1 the researcher gave an introduction and background to the study, and stated the problem, as well as the purpose of the study. A summarised description followed on the methodology referring to the population, data collection, and analysis of data to reach the aim of the study. An in depth discussion of the methodology of the study will be given in chapter 2.

CHAPTER 2

RESEARCH METHODOLOGY

2.1 INTRODUCTION

Chapter 1 provided an overview of this research, which included the background and problem statement, the objective of the study namely to explore and describe the challenges the professional nurses working in PHC facilities face regarding the implementation of the IMCI strategy. The paradigmatic perspective as well as a brief orientation of the research methodology was provided. Chapter 2 will offer a detailed description of the research methodology planned for this research. Special attention is paid to the research design, research method, the measures to ensure trustworthiness of the research and ethical issues related to quality of the research.

2.2 RESEARCH DESIGN

A research design is the blue print for conducting research (Burns & Grove, 2009:18) and guides the researcher in planning and implementing the study in a way that is most likely to achieve the research objective. In this study a qualitative research design was used because the researcher wanted to explore and describe the challenges faced by professional nurses in the PHC facilities regarding the implementation of the IMCI strategy. In the following paragraphs the identified research design is discussed.

A **qualitative research design** that is explorative, descriptive and contextual in nature (Burns & Grove, 2009:22) was used in order to gain a better understanding of the challenges that the professional nurses working in the PHC facilities are faced with when implementing the IMCI strategy in the Matlosana sub-district, North West Province. Nieuwenhuis (2007:78) explains that a qualitative research design is a naturalistic approach that seeks to understand the phenomenon in context or in a real life situation. Furthermore, qualitative research is interactive and subjective because the researcher conducts data collection and data analysis and wants to immerse herself into the research. Yet, qualitative research is also systematic as a research process is followed

(Burns & Grove, 2009:22). Through qualitative enquiry, the professional nurses' challenges were explored and described in the context of their working experiences to obtain first-hand knowledge and understanding (Polit & Beck, 2006:17; Vhuromu & Davhana–Maselesele, 2009:60).

The **exploratory nature** of the research was appropriate for this study as it allows for investigation of the phenomenon under study and for exploration of all sources of information in order to become aware of a situation that arises, like the challenges faced by professional nurses working in PHC facilities on the implementation of the IMCI strategy (De Vos *et al*, 2004:109; Polit & Beck, 2006:20; Neuman, 1997:19).

The qualitative research design gives the opportunity to **describe new meaning** that arises from the occurrence of events in real life situations to understand the phenomenon under study (Burns & Grove, 2009: 696). De Vos *et al.* (2004:109) and Neuman (1997:19) further explain that descriptive research is a picture of specific details of a situation. In this study the researcher described the participants' (professional nurses') challenges that they face regarding IMCI implementation in the PHC facilities.

According to Botma *et al.* (2010:195) a study is **contextual** when the researcher focuses on a phenomenon that occurs in a specific context. In this study, the PHC facilities in the Matlosana sub-district in the North-West Province where professional nurses who implement the IMCI strategy is the context in which the challenges faced by professional nurses in implementing the IMCI strategy is explored and described.

The context in the study mainly refers to PHC in South Africa and a brief discussion follows for a clear understanding. The National Health Plan (ANC, 1994:19) drawn up during South Africa's (SA) transformation, based on a PHC philosophy promoted the delivery of comprehensive and free of charge PHC services around the country (Kautzky & Tollman, 2008:18). The implementation of free health services in PHC facilities has led to improved access to health care (Ijumba, 2002:182), but placed a large burden on PHC staff and facilities. It is in these PHC facilities where different programmes are offered, including the IMCI strategy. Free health services was implemented to curb diseases that resulted in high mortality and morbidity rates of especially children under 5

years, due to unemployment, poverty and malnutrition, HIV/AIDS and other childhood illnesses The IMCI strategy assists the [professional nurse] to improve the coverage of essential child health interventions and provides relevant information to care givers (Horwood *et al.*, 2009c:1).

The study was conducted in the Matlosana sub-district's four PHC facilities where the IMCI strategy is practiced. The Matlosana sub-district is situated in the North-West Province (one of the nine South African Provinces) and resorts within the Kenneth Kaunda district. This sub-district consists of 16 PHC facilities with four community health care centres. Approximately 100 professional nurses in these clinics are in possession of an additional qualification, the post basic qualification in Clinical Nursing Science, Health Assessment Treatment and Care (HATC). A professional nurse with this additional qualification has the advantage of being IMCI trained since this is included in the curriculum.

The researcher concentrated on the four health care centres where comprehensive PHC services are delivered. A PHC care approach advocates that people should receive the appropriate health care that enables them to live socially and economically productive lives (De Haan *et al.*, 2005:10). Most of the programmes (mother-and-child, minor ailments, tuberculosis clinic and other programmes) are offered in the community health centres included in the study and they are open for 24 hours. This enabled the researcher to collect data from both participants that are work day duty and those that work night duty. The researcher, who also works in the PHC facilities around Matlosana sub-district, observed that about 75% of the community members visiting the facilities are Batswana, Sesotho and Shangaan with a low educational level, which subsequently influences childhood illnesses.

2.3 RESEARCH METHOD

A short description of the research method was given in Chapter 1. The subsequent paragraphs discuss the population, sampling and sample size, data collection, the role of the researcher, data analysis, ethical issues and trustworthiness.

2.3.1 Population and sampling

The data gathered on the challenges faced by professional nurses working in PHC facilities included a sample with reference to the context; that is the four PHC facilities within the Matlosana sub-district, North West Province (refer to Chapter 1 and Chapter 2, paragraph 2.2.1).

2.3.1.1 Population

For the purpose of this study all professional nurses, with or without IMCI training, who are actively involved in the care of children younger than 5 years and who implement the IMCI strategy in the PHC facilities were included in the study population. A population means those individuals who possess certain characteristics and meet the criteria for inclusion in a study (Strydom & Venter, 2004:198). Access to the population was negotiated with the facility managers as gate keepers and the PHC facilities were used as venues to conduct face-to-face interviews.

2.3.1.2 Sampling

A sample is a subset for measurement drawn from the population in which the researcher is interested (Strydom & Venter, 2004:199). In this study the sample was based on knowledge of the population and the purpose of the study and therefore it constitutes **purposive sample** (Babbie, 2007:184; Polit & Beck, 2006: 264). According to Brink (2006:133) **sampling** refers to the process of selecting the sample (part of a fraction of a whole) from a population in order to obtain information regarding a phenomenon in a way that represents the population of interest. The qualitative nature of this study required a sample from a population with first-hand knowledge and experience of the IMCI strategy and the challenges faced. This population consisted of professional nurses working in PHC facilities around the Matlosana sub-district, irrespective of whether they are IMCI trained or not, as they met the inclusion criteria and they had knowledge of the IMCI strategy.

The researcher's knowledge of the population was used to choose the participants to be included in the study according to the following inclusion criteria:

- professional nurses working in a PHC facility rendering care to children younger than 5 years;
- should have worked at least one year in a PHC facility after qualifying as a professional nurse;
- must have been registered with the South African Nursing Council (SANC) as professional nurses;
- should be able to understand and speak English because the interviews have been conducted in English; and
- they should be willing to participate voluntarily.

The **sample size** refers to the number of participants in a sample selected by the researcher (Polit & Beck, 2006:267). Maltby *et al.* (2010:256) describe the sample size as the point at which the researcher does not uncover any new insight from the data. In qualitative research the size of the sample and its saturation is the information obtained and the amount and useful information that is provided by the participants (Botma *et al.*, 2010: 200) as determined by the purpose of the study (Strydom & Venter, 2004:200). The purpose of the study is to explore and describe challenges faced by the professional nurses working in PHC facilities regarding the implementation of the IMCI strategy. The focus is on the nature and quality of information obtained from the nurses as participants. The number of participants will be adequate when data saturation is achieved in the study (Burns & Grove, 2009:361). The sample size according to Polit and Beck (2006:273) is based on information needs, or if data becomes redundant.

2.3.2 Data Collection

The following is a detailed description of the data collection action plan with specific reference to the role of the researcher, the physical environment during the interviews and the method of data collection.

2.3.2.1 The role of the researcher

Creswell (2003:34) stated that the researcher should indicate the steps taken to obtain permission to gain entry to the setting and collect data from the participants. Before data were collected the researcher obtained permission from the ethics committee of the North-West University, Potchefstroom Campus ethics committee (see Addendum A). Permission was also granted from the provincial office of the DoH in the North West Province (see Addendum E) and the district managers of the DoH within the Matlosana sub-district (see Addendum D). The researcher ensured that the DoH involved as well as the participants understood the importance of meeting the aim and objective of the study (Maltby *et al.*, 2010:310), which was to explore and describe the challenges faced by professional nurses regarding the IMCI strategy implementation in PHC facilities.

After permission was granted by the DoH in the North West Province and Matlosana sub-district, the researcher identified the participants in different health care centres within Matlosana sub-district who met the criteria as outlined earlier in this chapter. The researcher used the facility manager as the gate keeper who contacted the professional nurses in person or telephonically to schedule the time and date for a meeting between the researcher and the prospective participants. During the meeting the researcher explained the purpose and objective of the research, the method of data collection, as well as the ethical aspects regarding confidentiality and anonymity. After agreement was reached the researcher sent official letters that outlined all issues that were mentioned in earlier discussions as well as the criteria for inclusion in the study. The date for data collection was confirmed telephonically by the researcher with each PHC facility.

2.3.2.2 Method of data collection

Data collection is defined by Polit and Beck (2006:36) as pieces of information that the researcher gathers in a study. According to Brink (2006:141), data collection is critical and important to the success of the study. If high quality data is not collected, the accuracy of conclusions based on the findings of the study could be challenged. For the purposes of this study one-on-one personal interviews were chosen as an appropriate method of data collection. One central question was asked:

What are the challenges professional nurses face working in a PHC facility regarding the implementation of the IMCI strategy?

It was an unstructured interview that was purposefully conducted as an informal and free flowing discussion (Brink *et al.* 2006:152). Greeff (2004:298) points out that a one-on-one interview allows the researcher and participant to explore an issue. In this case it helped to determine and understand the participant's challenges experienced in the PHC facilities where they implement the IMCI strategy.

The interview was conducted by the researcher herself and the following procedure was followed:

- It was a face-to-face interview as defined by Polit and Beck (2006:241) and involved a personal meeting with a participant to ask questions;
- The interview commenced with an introduction of the researcher and the participant;
- The researcher explained the purpose of the interview;
- The consent forms were explained and a written consent was obtained from each participant;
- The use of a digital voice recorder was explained and permission was requested from the participant for its use;
- The researcher as interviewer explained that the participant had the right to withdraw at any time;
- The researcher explained that she would take field notes throughout the interview;
- Adherence to confidentiality was explained in that neither the name of the participant, nor that of the PHC facility will appear anywhere in the report of the study;
- The two voice recorders were switched on when the researcher and the participants agreed on the elements of the research as explained above.
- The researcher posed the research question as indicated above to initiate and guide the discussion (Greeff, 2004:298):

During the one-on-one interview the researcher encouraged and ensured the free flow of the interview by using the following communication techniques as described by Greeff (2004:294):

- Minimal verbal response: the researcher gave the occasional nodding of the head together with a 'hmm' or saying 'yes' to show the participant that the researcher was listening;
- Paraphrasing was used as a verbal response by the researcher to enhance meaning by stating the participant's words in another form but with the same meaning;
- The researcher probed further on statements by the participants as an attempt to obtain more in-depth information about the challenges faced by the professional nurses during implementation of the IMCI strategy. Probing statements were used such as 'can you tell me more about that';
- It was at times necessary to clarify some of the statements made by the professional nurses by asking, 'could you tell me more about....';
- Reflecting was done in order to expand on certain ideas like, 'so you believe that IMCI implementation is a real challenge';
- The researcher encouraged the professional nurses to pursue a specific line of thought, like 'that is interesting, can you tell me more?';
- The researcher as interviewer summarised the participant's ideas, thoughts and feelings verbally to see if what was said is really understood.

The researcher also used non-verbal communication skills, maintaining an open posture, eye contact, sitting up with no barriers between the participant and the researcher, nodding of the head and smiling. The duration of the interview was 45 minutes to an hour.

2.3.2.3 Research setting

The research setting is the location where the research is conducted at the site where the problem under study is experienced. According to Polit and Hungler (1993:305), the

setting is a context within which human behaviour unfolds and should not be constrained so that in-depth information can be captured. The environment should foster psychological freedom and enhance participation. The setting in this study was the PHC facilities in the Matlosana sub-district where professional nurses face challenges regarding IMCI strategy implementation.

According to Greeff (2004:316) the interviews must be held in a comfortable and non-threatening environment. The environment must meet the needs of both the researcher and the participants. The interviews took place in the four (4) PHC facilities in Matlosana sub-district as agreed with the researcher to make sure that the participants were comfortable. On the day scheduled for the interview, the researcher arrived early at the facility to prepare the venue for each interview. The researcher made sure that the environment was conducive for an open discussion; separate consulting room was used and equipped with two chairs for the participant and the researcher. The researcher ensured that the room had a comfortable temperature, was not too noisy and also served the participants with tea and snacks. The noise was minimal from the patients in the facility as the room was far from them. A notice of “No disturbance, interview in progress” was placed on the door.

2.3.2.4 Field notes

The observational data recorded during an interview are called field notes (Creswell, 2008:224) and can be written during the interviews or immediately after leaving the research setting in order not to forget crucial aspects of the interview (Corbin & Strauss, 2008:123). According to Stommel and Wills (2004:286) field notes contain short characteristic remarks on the participants, descriptions of participants in a setting, descriptions of the setting itself and descriptions of activities and events that occurred in the setting. The following are types of field notes as categorised by Polit and Beck (2006:307):

- observational notes: descriptions of the participants, the physical setting and activities that took place during the interview;

- theoretical notes: interpretive attempts to attach meaning to observations like identified themes, important information to go and read about and what to remember;
- methodological notes: reminders about how subsequent observations and data collection will be made;
- personal notes: the researcher's own feelings about the participants, the interviewer and the whole process of interview.

Field notes were typed, marked and attached to the transcription of each interview (see Addendum H for an example of field notes made in this study).

2.3.2.5 Transcribing the interview

The 18 (N=18) interviews (the spoken words of the professional nurses) captured by the digital voice recorder were transcribed verbatim by transcribers. The researcher listened to the recorded data to check the quality and to determine whether the transcriptions were true to what was said during the interview. Instructions were given to the transcribers on how to transcribe the interviews according to a standard format. All reactions like sighing, laughter, pauses or period of silence was indicated as discussed with the transcribers (see Addendum G for a part of a transcribed interview).

2.3.3 Data analysis

Data analysis includes categorising, ordering, manipulating and summarising the data and describing it in meaningful terms (Brink, 2006:170). The voice recordings of all the interviews of the professional nurses that render service to children younger than 5 years in the PHC facilities were transcribed verbatimly (see paragraph 2.3.2.5) and then analysed.

According to Burns and Grove (2009:521) the researcher listens to the voice recording after each interview as soon as possible. Once the interviews have been transcribed the researcher will:

- divide the transcripts into three columns; the column on the left side is for concepts, with data in the middle and column on the left side for personal perceptions;
- read the transcripts to get an overall idea of the emerging themes;
- read the transcript and cluster similar words and meanings together (Creswell, 2009:186);
- use words and sentences as units of analysis by re-reading the transcripts underlining spoken words and sentences of the analysis;
- transfer the underlined spoken words and sentences to the left column as categories, while writing perceptions that come to mind in the right hand column;
- read and re-read the notes and transcripts, recalling observation and experiences, listening to tapes until becoming immersed in the data (Burns & Grove, 2009:521);
- reduce data and attach meaning to elements in the data, classify elements in the data;
- use coding as a means of categorising (Burns & Grove, 2009:522). As the researcher is not experienced in coding, an independent coder was appointed to assist in the process of data analysis.

2.3.4 Literature integration

The purpose of literature integration is to compare the findings from the study with the literature to determine the current knowledge of a phenomenon (Botma *et al.*, 2010:196). After data collection and analysis, a comparison was made between the relevant literature and the findings of this study on the challenges faced by professional nurses in the PHC facilities regarding the IMCI strategy implementation. A scientific basis was provided through literature integration to elaborate on the themes and sub-themes and where literature was not found on a finding, it was interpreted as a unique finding and was indicated as such. The conclusions drawn from the findings and the

existing literature were used as basis to make relevant recommendations to the nursing practice, -education and -research on IMCI implementation in PHC facilities within the context of the South African health system.

Literature was drawn from the following data bases: Academic Search Premier,A-Z e-article list of the NWU, Cinahl, Google Scholar, Health Source: Nursing/Academic edition, Medline, Nexus, PsycInfo, Thesis and dissertations (NWU), NWU library, Inter-library loans, Science Direct.

2.4 MEASURES OF TRUSTWORTHINESS

Trustworthiness is the ability of a researcher to persuade the audience that the findings of a study are worth paying attention to (Lincoln & Guba, 1985:290). To enhance trustworthiness the researcher adopted the model of Guba as described by Krefting (1991:215).

Credibility refers to confidence in the truth of the data. The goal of credibility is to determine that the participants were accurately identified and described (Brink 2006:118; Polit & Beck, 2006:332). The following techniques were used to improve the **credibility** of this qualitative research (Jooste, 2010:319):

Polit and Beck (2006:332) describe **prolonged engagement** as investment of sufficient time in data collection to have an in-depth understanding of the culture and language of the population to be researched, in this case the professional nurses in the PHC facilities. Lincoln and Guba (1985:301) state that prolonged engagement is essential for building trust and rapport with the participants. Lincoln and Guba, quoted by Krefting (1991:217), state that prolonged engagement allows the participants to be accustomed to the researcher and also for the researcher to check perspectives. In this study, in line with Babbie *et al.* (2004:277) prolonged engagement meant that the researcher spent sufficient time in each of the PHC facilities to ensure a good understanding of the context of each of the facilities. Time was also spent with the various participants to increase trust and rapport. This created an environment in which the participants shared with the researcher sensitive information.

Persistent observation refers to the researcher focusing on some aspects of the situation that are relevant to the phenomenon being studied (Polit & Beck 2006:333). As part of this research the researcher spent time at the PHC facility to work with professional nurses who render service to children younger than 5 years in order to continue observation after the interview. Persistent observation of the professional nurses in PHC facilities with regard to the circumstances under which they work, the interaction between the participants, care givers and the children younger than 5 years establishes the credibility of the study (Krefting, 1991:218).

In qualitative research there's no credibility in the absence of **dependability** (Polit & Beck, 2006:335). Dependability relates to the consistency of findings (Krefting, 1991: 221). The study should be auditable in the sense that it is open to other researchers who must be able to follow the researcher's decisions. The study won't be influenced by any bias of the researcher. An enquiry audit is one technique to confirm the dependability of a study and involves the scrutinising of data and relevant supporting documents by an external interviewer (Brink, 2006:119; Polit & Beck 2006:335).

Confirmability refers to objectivity of data. It guarantees that the findings, conclusions and recommendations are supported by the data and there is internal agreement between the researcher's interpretation and the actual evidence. Congruency may be between two or more independent people (Brink, 2006: 119; Polit & Beck, 2006: 335). Giving the transcripts and the tape to an expert in qualitative studies in order to conduct an enquiry audit on the data and the meaning attached to it, enhanced the value and confirmability of the research.

According to Lincoln and Guba (1985:318), **transferability** refers to the extent to which findings can be transferred to other settings, in this case to other primary health care settings where IMCI implementation is a challenge. **Thick description** is a rich, detailed and thorough description of the research context in a qualitative study (Polit & Beck, 2006:551). This thick description of the setting, transactions and processes of the data is supplied for comparison.

2.5 ETHICAL CONSIDERATIONS

Nursing research is a process that utilises human beings as participants. It therefore relates to ethical considerations with regard to the protection of participants and are based on human rights that need to be protected (Brink, 2006:31).

The following processes were followed and documents were provided with regard to **permission to conduct this research**:

- Permission to continue with this research was obtained from the Ethics Committee of the North-West University, Potchefstroom Campus after the proposal had been approved (certificate number NWU-00058-11-A1) (see Addendum A).
- Permission to conduct the study was also obtained from the Department of Health in the North West Province (see Addendum E).
- Permission to use the clinical facilities was obtained from the management of Matlosana sub-district (see Addendum D).
- The participants gave informed consent to voluntarily participate after thorough explanation of the purpose of the research and methods, as well as the procedures that will be followed to do the research (see Addendum F)

The following international and national ethical guidelines directed the ethical considerations in this research:

2.5.1 International guidelines

2.5.1.1 The Nuremberg code

The following guidelines from the Nuremberg code (Burns & Grove, 2009:185) were adhered to:

- Voluntary consent was signed by participants (see Addendum F).

- Participants had the right to withdraw from the research at any stage without discrimination. This was explained to the professional nurses to give them the opportunity to decide on them giving consent.
- Participants need protection from physical and mental suffering, disability and death during research. The qualitative approach used to explore and describe the challenges faced by the professional nurses when implementing IMCI in PHC facilities did not pose opportunities for any kind of suffering.
- There must be balance between benefit and risk in the research. This research held no risk and can benefit the professional nurses working in PHC facilities to gain better understanding of the phenomenon in the study through the one-on-one interviews with the professional nurses.

2.5.1.2 Helsinki declaration

- Participants were protected from harm during this non-therapeutic research. The validation process showed that the participants were not at risk of any harm in the process of gaining new scientific information.
- The life, health, privacy and dignity of the research participants were not jeopardised in this qualitative study. This study was not a clinically controlled trail and therefore the guideline on placebo use did not apply.

2.5.2 National ethics guidelines

In South Africa the Medical Research Council (MRC) is the body that formulates ethics guidelines for research (NWU, 2010:51) as discussed below.

- **Principle of respect for persons**

The human dignity of the participants should be respected (Brink, 2006:32; Burns and Grove, 2009:189). Participants had a choice to take part in the research and could withdraw from the study at any time. The environment where interviews took place was well prepared, comfortable and conducive. The researcher took care not to exceed the timeframe that was given for each interview and availed her for further clarification on

the interview before and after the scheduled interview. The participants were not coerced, adequate information was given to the professional nurses working in the PHC facilities and they participated voluntarily.

- **Principle of justice**

The selection of participants should be fair. Participants were selected for reasons directly related to the study problem (purposeful sampling). In this research they were selected fairly as either being IMCI trained or specifically not trained.

Respect for privacy was honoured by not divulging the information gathered to anybody. The participants were encouraged to feel free to divulge any problems hindering implementation of IMCI strategy. Confidentiality of information was maintained by not revealing the names of participants in any publication of the research or by sharing the information with anybody. The researcher respected the participants' right to privacy in that all participants remained anonymous (Brink, 2006: 33; NWU, 2010:520; Burns & Grove, 2009:195).

- **Informed consent**

The participants signed an informed consent after the researcher explained to them the aim and objective of the study. The population of professional nurses who were included in the sample to participate had a choice whether to participate or decline. The researcher made sure that the participants were not coerced (Polit & Hungler: 1993:359; NWU, 2010:55; Brink, 2006:35).

- **The right to protection from discomfort and harm**

Beneficence is protection of participants from harm and discomfort, either physically or emotionally (Burns & Grove, 2009:198; Brink, 2006:32). In this research the researcher explained the risk and benefit by explaining the study in full and extensively before the participants agreed to take part in the research, they were furthermore given a chance to ask questions. No harm was done to the professional nurses that participated in the

study and the one-on-one interviews were conducted in a private, well-ventilated room where refreshments were offered to the participants.

2.6 RESULTS

The results of the study will be communicated through recommendations made to the Matlosana Health District so that the implementation of the IMCI strategy should be strengthened in the PHC facilities in order to reduce the mortality and morbidity rate of children younger than 5 years. The results will also be published in a scientific journal.

2.7 SUMMARY

In this chapter a detailed description of the research design, data collection and analysis was given. The trustworthiness and ethical issues were also discussed. The next chapter will deal with the results, its discussion and literature integration on the challenges faced by professional nurses working in PHC facilities regarding IMCI implementation.

CHAPTER 3

RESEARCH RESULTS AND LITERATURE INTEGRATION

3.1 INTRODUCTION

Chapter two provided a detailed description of the research design and method. This chapter describes the realisation of data collection and analysis. The research results pertaining to the challenges faced by professional nurses in Primary Health Care (PHC) facilities are discussed. The research findings are enriched by direct quotations from participants and this is integrated with literature to culminate in conclusive statements regarding the objectives of this study namely:

To explore and describe the challenges faced by the professional nurses working in a PHC facility regarding the implementation of the IMCI strategy

3.2 REALISATION OF DATA COLLECTION AND ANALYSIS

The realisation of data collection is divided into the realisation of data collection followed by the realisation of data analysis.

3.2.1 Data collection

Data collection took place in the Matlosana sub-district's four (4) Primary Health Care (PHC) facilities where the IMCI strategy was practiced. The Matlosana sub-district forms part of the Dr Kenneth Kaunda district and is situated in the North West Province. The study population consisted of professional nurses who work in one of the four Community Health Centres (CHC) within the Matlosana sub-District where PHC services are rendered. Purposive sampling was done (Polit & Beck, 2006:264) as prospective participants were purposively selected on the basis of working in a PHC facility with children under 5 years and with one year or more work experience as a professional

nurse. Eighteen (N=18) professional nurses participated in this research (see Table 3.1 for a demographic profile of participants).

The participants signed a consent letter (see Addendum F) after adequate information regarding the research was provided. Participants had a choice whether to participate or decline. The researcher had access to the population through the facility managers, who acted as gate keepers. Due to the busy PHC facilities and the shortage of staff in the identified PHC facilities, individual one-on-one interviews on a appointment basis conducted by the researcher was the most effective method of data collection. These interviews were verbatim audio-recorded on a digital voice recorder for the purpose of transcription. In some PHC facilities the researcher had to collect data during the night when it was quiet. The main question asked by the researcher was:

“What are the challenges professional nurses who work in PHC facilities face with regard to the implementation of the IMCI strategy?”

3.2.2 Realisation of data analysis

The researcher commenced with data analysis independent from the co-coder. Transcripts were read and similar words and meanings were clustered together (Creswell, 2009:186) (please refer to Addendum G for an example of a transcript). Using words and sentences as units of analysis, the transcripts were re-read and spoken words and sentences of the analysis were underlined. The underlined words and sentences were then transferred to the left column as categories, while perceptions and thoughts that came to mind were written in the right hand column. Main- and sub-categories emerged from the data.

A meeting was scheduled between the researcher and co-coder after data analysis had been conducted. Consensus between the researcher and the co-coder resulted in three main categories and eight sub-categories with regard to the challenges faced by professional nurses to implement the IMCI strategy in PHC facilities in the Matlosana

sub-district. The main- and sub-categories are displayed in figure 3.2 below and will provide the structure for the discussion of the research results and literature integration.

The following sections provide information on the demographic data of participants, research findings and discussion of the findings.

3.3 DEMOGRAPHIC PROFILE OF PARTICIPANTS

The demographic profile of the participants follows hereafter in table format to offer information on the total number of professional nurses that participated in each PHC facility, their gender, age, training and years of experience (see Table 3.1).

Table 3.1 Demographic profile of professional nurses as participants (N=18)

PHC Facility	Number of participants per facility	Gender	Age of participants	Participants IMCI trained	Participants not IMCI trained	Health assessment treatment and care
A	6	M2, F4	42-55 yrs	6	-	4
B	4	M1, F3	34-46 yrs	4	-	2
C	6	M2, F4	29-49 yrs	5	1	4
D	2	M1, F1	32-50 yrs	2	-	2
Total	18	M6, F12		17	1	12

M=male, F=female

Although some of the participants were Tswana, Sotho and Afrikaans speaking it was not difficult to conduct the interviews and collect data in English, one of the 11 official languages of South Africa. English is the most commonly spoken language in public life and is regarded as the country's "lingua franca" (South Africa.info, 2012). From the demographic data it is clear that the majority of participants were IMCI trained and has an additional qualification in Clinical Nursing Science, Health Assessment, Treatment and Care (HATC).

3.4 DISCUSSION OF THE RESEARCH FINDINGS

From the data analysis, three main categories and seven sub-categories were identified, as summarised in table 3.2. The discussion of the research findings has been structured by discussing each main category with its related categories and sub-categories. With each discussion literature integration will be conducted. The main categories are:

- Organisational and service delivery challenges (Column A).
- IMCI strategy implementation-specific challenges (Column B).
- Challenges external to the clinic impacting directly on IMCI implementation (Column C).

Table 3.2: Main categories, categories and sub-categories with regard to the challenges faced by professional nurses in the PHC facilities in the Matlosana sub-district regarding the implementation of the IMCI strategy

	COLUMN A	COLUMN B	COLUMN C
MAIN CATEGORIES	Organisational and service delivery challenges	IMCI strategy implementation-specific challenges	Challenges external to the clinic impacting directly on IMCI strategy implementation
CATEGORIES	Organisational challenges impacting on the implementation of IMCI strategy	Challenges pertaining to the IMCI strategy	Expectations of mothers
SUB-CATEGORIES	<ul style="list-style-type: none"> • Insufficient space in facilities due to too few consulting rooms. • Lack of IMCI strategy medicine in the clinic. 	<ul style="list-style-type: none"> • Time consuming to use the chart booklet, to verify and to conduct double-writing. • Implementation only selective elements of the comprehensive IMCI strategy. • Lack of continuity of service on follow-up of children. 	<ul style="list-style-type: none"> • Mothers want treatment in the form of medication and not only health education or home remedies. • Mothers want to be treated by specific professional nurses. • Although mothers receive health education to return immediately to the clinic, they return too late, but still expect service.

CATEGORIES	Service delivery challenges impacting on the implementation of the IMCI strategy	Challenges pertaining to the IMCI strategy versus the PHC approach	Insufficient information provided about children under 5
SUB-CATEGORIES	<ul style="list-style-type: none"> • Long queuing of patients at the clinic impacts on the amount of time available per patient. • Staff shortages and insufficient IMCI strategy trained staff at the clinic. • Absence of a mentoring system at the clinic to support PNs in IMCI strategy. • Lack of support from facility managers prevents proper implementation of IMCI strategy. • IMCI strategy implementation is challenging, especially if you are not IMCI strategy trained. 	<ul style="list-style-type: none"> • Challenges pertaining to nurses that are trained in Health Assessment Treatment and Care (HATC). 	<ul style="list-style-type: none"> • When a child is brought to the clinic by the granny or a secondary caregiver, especially when the mother passed away, it leads to insufficient information, which in turn leads to the incorrect classification. • Mothers don't always want to disclose the HIV status of the child younger than 5 years, which leads to incorrect classification and the delay of treatment

3.4.1 Organisational and service delivery challenges

This main category, as indicated in table 3.2 Column A, became evident during interviews and was identified by participants as the organisational and service delivery challenges that impact on IMCI implementation. This main category places the focus within the operations of each PHC facility with regard to the organisation and service delivery on two sub-categories that challenge the implementation of the IMCI strategy.

3.4.1.1 Organisational challenges impacting on the implementation of IMCI strategy

The first category that crystallised from the interviews as illustrated in figure 3.1 will be discussed.

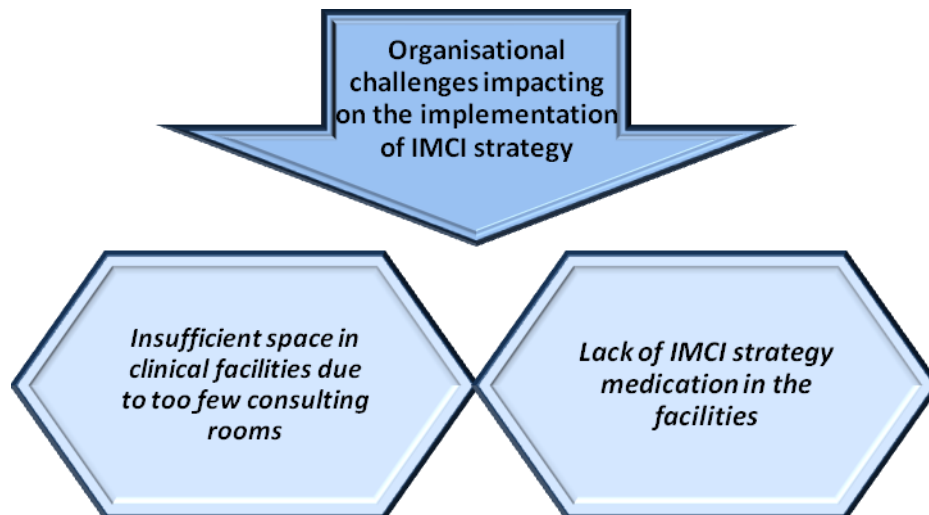


Figure 3.1: Organisational challenges impacting on the implementation of IMCI strategy

During the individual interviews most of the participants indicated their frustration when wanting to operationalise the IMCI strategy due to the lack of physical space in the facilities. The lack of physical space seems to be a problem in all the PHC facilities due to too few consulting rooms as the clinical facilities are very small. The lack of medication refers to IMCI medication. The shortage means that professional nurses cannot treat a child when it is needed. The organisational challenges of participants in implementing the IMCI strategy with regard to the lack of physical space due to few consulting rooms in facilities will be discussed below.

- ***Insufficient space in clinical facilities due to too few consulting rooms***

The professional nurses in PHC facilities expressed the view that it is a challenge to implement the IMCI strategy when there is a lack in physical space at the facilities. The participants verbalised this challenge when they explained that there will be only two consulting rooms available for the nurse based activities and the third consultation room will be occupied by a medical practitioner. One participant indicated that two professional nurses will use one consulting room for the IMCI strategy, which results in a lack of privacy. They further mentioned that sensitive and important questions are omitted during consultation with the mother and child due to the presence of another patient in the consulting room. The implementation of the IMCI strategy becomes a

challenge and frustration for the professional nurses working in PHC facilities due to the lack of confidentiality and necessary privacy when implementing the IMCI strategy. Privacy and confidentiality are important when questions have to be asked on infections e.g. Human Immune Deficiency Virus (HIV) for effective assessment during the classification of the sick child younger than 5 years using the IMCI strategy. In addition to the assessment of the child for HIV, the mother may have to be counselled on other private and specific needs. The participants experienced that due to the above-mentioned challenges, the IMCI strategy cannot be effectively and sufficiently implemented. The following are the direct quotations from the participants:

“...structure of the clinic is small.....we are working two PNs in each consulting rooms....”

“...there are some questions that the mothers cannot answer in front of the other person...”

“...No privacy sometimes you omit the sensitive issues due to the second person nearby...”

“...structure in our clinic no space to sit with one person for that longotherwise all other people won't be seen...”

“.....other days we have only one room to use and the other one is used by the doctor....”

The view of the participants is supported by Kollapen (2009:39), who reports that one of the problems encountered in a public inquiry report was the lack of space, which affected the patient's right to privacy. Similar findings were reported in a study done by Vhuromu and Davhana-Maselesele (2009:65) where it was mentioned that clinics are very small in general and there is a lack of space and rooms to counsel patients. In a study done in Kenya by Mullei *et al.* (2008) there was the challenge of inappropriate facility lay-out and health workers could not witness the patients when taking their first medication.

- ***Lack of IMCI medication in the facilities***

The challenge of the lack of IMCI medication was verbalised by most participants. This challenge prevented participants from implementing the IMCI strategy. The participants reported that the IMCI strategy utilises specific medications as indicated on the chart booklet and these are frequently not available for the children. The IMCI medication in

the chart booklet is used when the professional nurse uses the IMCI strategy only and must be available in all the facilities where the IMCI strategy is implemented. One professional nurse mentioned using the medication in the Essential Drug List (EDL), which is a national pharmacy guideline used in the PHC clinics to manage common conditions (DoH, 2008:xvi). If the IMCI drugs are not available the professional nurse will refer to the EDL for that specific condition. Some of the participants verbalised that they refer children to the pharmacy for basic medication such as paracetamol (Panado®) as this medication is not available at the PHC clinic. According to Amaral *et al.* (2004:S209), the second component of the IMCI strategy is to improve the health system. It focuses on supporting improved case management and this includes the availability of drugs. The following are the comments given by professional nurses during interviews:

“...the treatment that IMCI booklets say you must give out most of the time we don't have it in stock”.

“...if we don't have Panado.....then we tell the mothers to go to the chemist.”

“.....You have to go and refer to a book like the EDL or refer the child.”

“....some medication in the chart booklet we don't have it in stock, this prevent IMCI implementation....”

Saloojee (2007:175) highlights insufficient drug supplies in general as a health system challenge. Similar incidents were reported where the shortage of IMCI medication caused patients to be referred to hospital to collect medication (Vhuromu & Davhana-Maselesele, 2009:60). In a policy brief in Kenya (Mullei *et al.*, 2008) health workers were challenged by a frequent drug shortage in health care facilities. Similar results regarding the lack of drugs in clinical facilities were identified in a study done by Kahabuka *et al.* (2011:7) where mothers complained that they travelled a distance to come to a health facility only to find out that the drugs were out of stock. Gombe *et al.* (2010:9) also identifies a lack of health facility support with drug shortages as one of the components. The lack of medication utilised in the IMCI strategy is confirmed in the literature.

3.4.1.2 Service delivery challenges impacting on the implementation of IMCI strategy

The second category under Column A is the service delivery challenges that impact negatively on the IMCI strategy. The sub-categories applicable to these service delivery challenges are illustrated in figure 3.2 and discussed below.

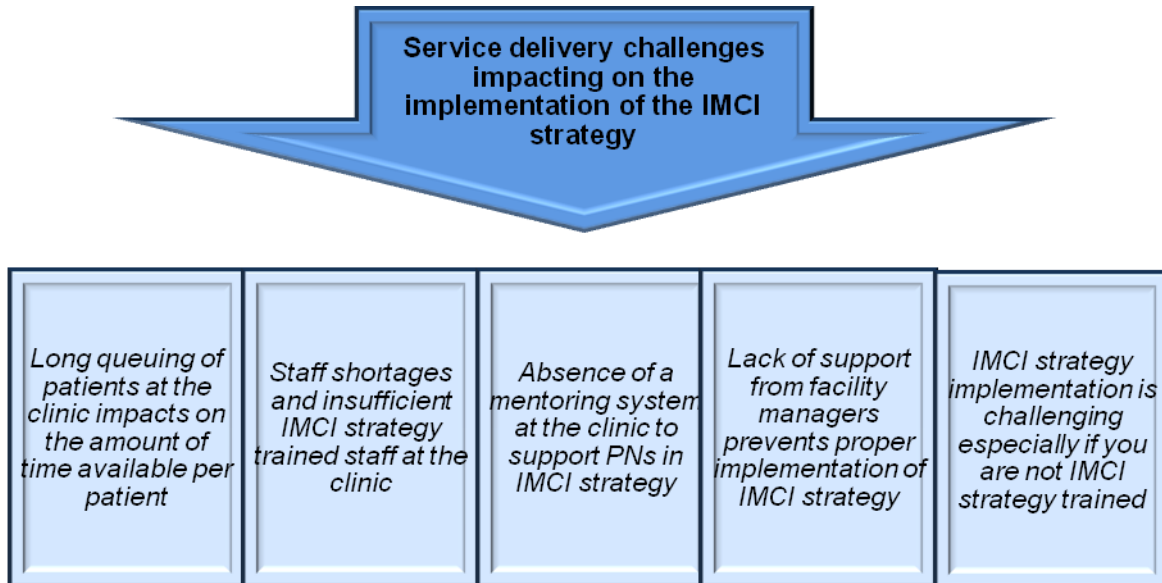


Figure 3.2: Service delivery challenges impacting on the implementation of IMCI strategy

- ***Long queuing of patients at the PHC facility impacts on the amount of time available per patient***

Although some of the professional nurses in the PHC facilities wanted to implement the IMCI strategy, factors such as long queuing of patients challenged its implementation. Further challenges that prevented IMCI strategy implementation emerged from the interviews. Thorough IMCI strategy implementation can take more than fifteen minutes per patients, which has to be conducted while other patients are queuing. Participants verbalised their challenge that paging through the chart booklet takes time while the waiting room is filled by patients and patients are queuing outside. With regard to the time available during the IMCI strategy implementation, the participants indicated that it takes longer to consult a restless child and this impact on the time to implement the IMCI strategy. One participant mentioned that when the clinic is overcrowded by patients, patients accuse professional nurses of being slow, saying that they do not know their

work and are disorganised The participants acknowledged that to prevent long queuing and dissatisfaction from the community members, the IMCI strategy is not implemented. The following are direct quotations from the participants:

“.....page through the book.....and in the meantime the queue is waiting....”

“.....you will find that the queue is so long then you will find we are focusing on the queue and not the IMCI..... it takes too long “

“....then the mother complains now the child is coughing....you start with IMCI.....the queue is standing now we have to focus on this child.”

This result is confirmed by Horwood *et al.* (2009a:6), who reports that nurses in general do not attend to patients' needs properly due to long waiting lines. The focus is then replaced by seeing the maximum number of patients in the shortest time to shorten the waiting line and not necessarily on effective service delivery. In addition Saloojee (2007:174) states that an average IMCI strategy consultation lasts between 8-16 minutes longer than a traditional consultation and this is time consuming and challenging especially when patients are waiting. In a Brazilian study (Adam *et al.*, 2005:54) it was reported that health workers trained in the IMCI strategy spend a longer consultation time with children younger than five years and this impacted negatively on the queue outside.

- ***Staff shortages and insufficient IMCI strategy trained staff at the clinic***

Another challenge that impacted on professional nurses in the PHC facilities to implement the IMCI strategy was the shortage of staff aggravated by the limited number of professional nurses specifically trained to implement IMCI. The training of IMCI was launched in South Africa in 1998. With this launch there was a national effort to train all the professional nurses working in PHC facilities in a training programme of eleven days. Training was on the IMCI strategy for health workers in order to acquire new skills to manage sick children more effectively (WHO, 1999:2). Although IMCI strategy training still continues, there are professional nurses who are currently still not trained in the IMCI strategy.

The shortage of staff was mentioned by the majority of participants who also reported that this affected the long queuing of patients and, the lack of available support professional nurses which results in ineffective implementation of the IMCI strategy and falling back or the less time consuming PHC approach. One participant explained that when they have many programmes running consecutively in the PHC facility, this amplified the staff shortages and impacted negatively on the IMCI strategy implementation as it slowed down the long waiting queues.

Participants further voiced that professional nurses, for different reasons, although IMCI strategy trained, would default and do not implement the IMCI strategy. Another challenge of implementing the IMCI strategy as eluded by participants was the lack of available support to professional nurses who were allocated to work with children and yet not IMCI trained. One professional nurse without training in implementing the IMCI strategy, explained during the interviews that she is not familiar with the IMCI strategy and was supported and mentored by student nurses and not by a professional nurse. This was expressed as follows:

“.....our main problem is that we are short staffed....”

“...shortage of staff, we will have slow service delivery and patients are going to complain, queue will be slow...”

“....Shortage of staff is a problem...we have too many programmes in the clinic, IMCI takes time...”

“...if a nurse is not IMCI trained they treat children using PHC approach not using IMCI...”

“...Some nurses still need training on IMCI...it is difficult if this nurse must work with children then IMCI is not practised...”

“....not all of us were IMCI trained.... if you are alone there is nobody to ask due to shortage of staff...”

Literature confirms that a shortage in staff that can prevent the effective implementation of the IMCI strategy. In a study done by Horwood *et al.* (2009a:6), the health workers stated that IMCI cannot be implemented properly as there is staff shortage. One professional nurse reported that she was the only one who was IMCI trained at her facility and could not cope with consulting all children under 5 years. The above concern of shortage of staff was also identified in a study done by Karamagi *et al.* (2004:7).

Vhuromu and Davhana-Maselesele (2009:63) reached similar results and reported on difficulty in implementing IMCI due to lack of sufficient staff.

- ***Absence of a mentoring system at the clinic to support professional nurses in the IMCI strategy***

Participants expressed their concern about the absence of mentoring of professional nurses following their training in implementing the IMCI strategy. They were of the opinion that after training mentoring and supervision by IMCI strategy expects are very important to assist with the effective implementation of IMCI. It was reported that even the IMCI strategy trained nurses cannot mentor those that are not trained or nurses who are learners in the strategy due to a shortage of staff. Mentoring can be in the form of supervisors who visit the nurses after training to make sure that learners implement IMCI as expected or in the form of other IMCI strategy trained professional nurses in the facilities. One professional nurse mentioned that sometimes you are not sure of something, but there is nobody to ask and clarify it. If supervisors can come on regular basis then it will ease their work. The following are the comments quoted from the interviews:

“ ..you are not mentored...”

“...we cannot assist those that are not trained on daily basis...” they need to be independent...”

“.....there is no other sister to help you.....”

“the newly qualified professional nurses need a mentor but because all of us will be busy you help where you can.”

“...if trained sometimes you need someone who is experienced....sometimes you have confusion...you need somebody to ask but there is nobody....”

Bryce *et al.* (2003:160) confirms the lack of supervision and mentoring by IMCI trained supervisors. After training supervisors must do follow-up supervision and support the professional nurses. Stellenberg *et al.* (2004:1593) and Ahmed *et al.* (2010:130) identify that this is not done and that supportive supervision is necessary and associated with improved quality of care to children younger than 5 years. A study

conducted in North East Brazil by Amaral *et al.* (2004:215) confirms the danger of poor supervision in facilities. Saloojee (2007:175) also identified that supervision of professional nurses is not sustained.

- ***Lack of support from facility managers prevents proper implementation of the IMCI strategy***

The participants verbalised their dissatisfaction with the lack of support from facility managers in implementing the IMCI strategy. Although the facility managers are trained in the IMCI strategy and are aware of its time consuming nature, the facility managers tend to fail to support the professional nurses in this regard. In addition the participants felt that facility managers require that the professional nurses should issue medication to children against the instructions of the IMCI strategy. The following are quotes from the participants:

“...if client comes and you give health education,...client will go to management and complain that.....instead of management to explain to the client she will crucify you.....”
“...Supervisors knock on the door if you are still busy....feel that you have taken a long time....”
“...Supervisors monitor time frame that you have taken with the patient....”
“....no support from managers, If patients complain they come to you shouting....”
“...Supervisors monitor time frame that you have taken with the patient...”

Literature confirms that a lack of support from clinic supervisors is a common phenomenon. Sleutel *et al.* (2007:207) note that nurses undermine attempts to use evidence-based care in general and were resistant to new ideas. Participants in a study conducted by Negarandeh *et al.* (2006:4) explained the lack of support they experience from clinic supervisors. In addition research conducted by Prosper *et al.* (2009:47) confirms that supervisors are not supportive, but will instead give treatment that is not supposed to be given to mothers in the IMCI strategy.

3.4.2 IMCI strategy implementation–specific challenges

The second main category that emerged from this research was challenges pertaining specific to the implementation of the IMCI strategy.

3.4.2.1 Challenges pertaining to the IMCI strategy

This sub-category explores challenges specific to operationalising the IMCI strategy (see Figure 3.3 for illustration).

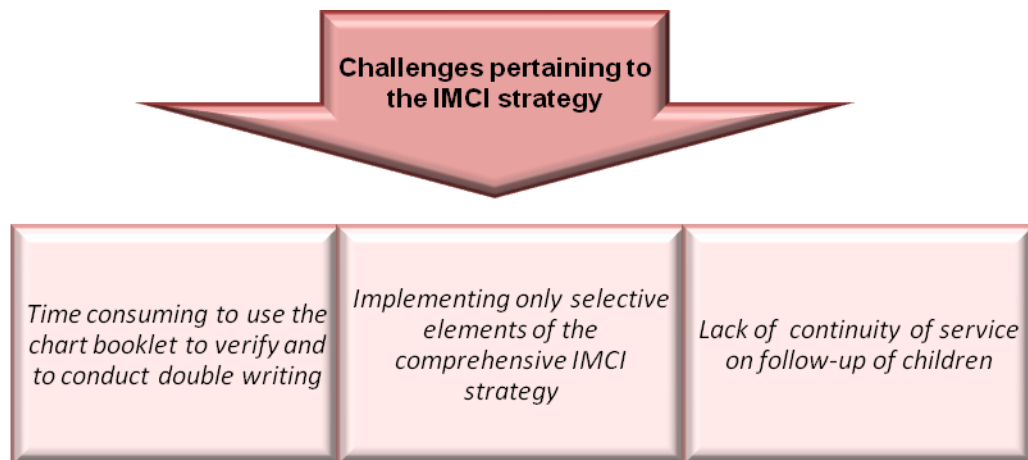


Figure 3.3: Challenges pertaining to the IMCI strategy

It refers specifically to the fact that the implementation of the IMCI strategy is time consuming. Some professional nurses tend not to use the strategy comprehensively from the beginning to the end, but to focus only on selected items. Due to various factors the continuity of the IMCI strategy is disrupted, which impacts on its effectiveness. In the following paragraphs these sub-categories will be described in combination with literature integration.

- ***Time consuming to use the chart booklet to verify and to conduct double writing.***

The professional nurses voiced the opinion that to implement IMCI comprehensively is time consuming, especially having to record IMCI activities in both the specific IMCI booklet and the Road to Health Booklet. The expectation that nurses have to do

extensive and duplicating recording become even more challenging when the child is restless and crying. The following quotations from the interviews with the professional nurses substantiate the findings:

“...the IMCI booklet it is too long. It takes half an hour to three quarters of an hour just to do one patient when the hallway is full of people. ”

“...it takes us a long time you have to spend at least thirty minutes or more with that child examining that child using IMCI tool....”

“...we will be taking more than fifteen minutes to one child and sometimes you will find a difficult child to attend ,sometimes the child is restless.....”

“...writing in the recording forms and in the road to health chart is a duplication and it takes time.....”

In a study done by Horwood *et al.* (2009a:5) IMCI trained health workers were interviewed and these workers indicated that the major barrier to IMCI implementation is that IMCI consultation takes long and there is a problem with staff shortages. This confirms the challenges faced by PHC nurses. The time consuming nature of IMCI is one of the constraints identified in the studies done by Ahmed *et al.* (2010:130) and Karamagi *et al.* (2009:1). Armstrong *et al.* (2004:1587) conducted a study in Tanzania in which time spent in consultation with children younger than five years proved to be a concern. Saloojee (2007:174) identified the consultation time as between 8-16 minutes, which is too long.

- ***Implementing only selective elements of the comprehensive IMCI strategy***

During the interviews with the professional nurses in the PHC facilities, the issue of concentrating on only specific elements of the comprehensive IMCI strategy was raised. Professional nurses acknowledged that the IMCI strategy can become very time consuming when all the elements are implemented. This becomes relevant when there is a staff shortage in the PHC facility and when patients are waiting in a long queue. The professional nurses will then focus only on one aspect of the IMCI strategy and omit the rest, resulting in illnesses being missed. Illnesses might be missed by concentrating on a specific box in the IMCI strategy. The following quotes from the participants support these findings:

“...if the mother say the child has cough, I only concentrate on the cough and leave all other boxes...”

“...if I do immunisation, you look at the weight and if the child is growing well then its ok...”

‘...I won’t say IMCI is not practised but we don’t go according to that form, the recording form.....’

The improper utilisation of the IMCI strategy by skipping some of the elements and not meticulously following the guidelines are confirmed by Prosper *et al.* (2009:51).

- ***Lack of continuity of service on follow-up of children***

The follow-up of children serves as a specific instruction in the IMCI strategy. This sub-category refers to factors that impact on the follow-up of children, resulting in a disruption in the important follow-up in the IMCI strategy. The first factor disrupting the IMCI strategy implementation was that mothers didn’t bring children for follow-up appointments as requested. The second challenge is when a mother returns to the clinic, but cannot be consulted by the professional nurse that requested the follow-up and if the purpose of the follow-up is not clearly stated, the mother may be advised to return to the clinic again. The following direct quotes from participants provide evidence for the findings:

“.....when patient comes if you are not there they will tell the patient that that sister of yours is off you will wait for her.....”

“.....if you say bring back the child they don’t come.....some important medication are missed...”

“...review date, mothers come and if I’m not available the sisters are very lazy to recheck and assess again....”

A break in continuity of the IMCI strategy was confirmed by Prosper *et al.* (2009:51), who also found that only a limited number of mothers will comply with follow-up instructions. The majority of mothers will only return to a clinic once the child is ill again.

3.4.2.2 Challenges pertaining to the IMCI strategy versus the PHC approach

The PHC approach in this study refers to comprehensive PHC of which Health Assessment Treatment and Care is part. This category then refers to the challenges that emerge from the fact that the PHC facilities that are based on a PHC approach which may impact on the effective implementation of the IMCI strategy. Although PHC and IMCI strategy should function in conjunction in complementary to each other the descriptions below portray that differences do exist.

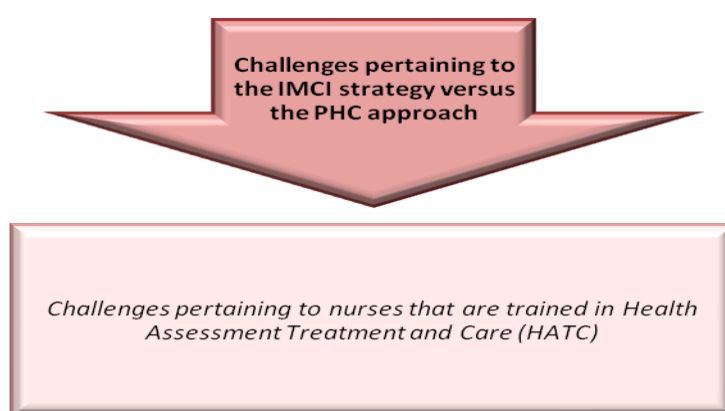


Figure 3.4: Challenges pertaining to the IMCI strategy versus the PHC approach

- ***Challenges pertaining to nurses that are trained in Health Assessment Treatment and Care (HATC)***

One of the challenges that were highlighted by the participants was that most of the professional nurses working in the PHC facilities were trained in Health Assessment Treatment and Care (HATC). This results in a combination of the IMCI strategy with HATC, causing professional nurses to confirm everything by means of a stethoscope. In HATC the professional nurse is trained to observe the patient comprehensively and to use the stethoscope to auscultate. Yet in the IMCI strategy the professional nurses assess, classify and treat without using any instruments as this strategy is based on “look, listen and feel”. This causes professional nurses to combine HATC principles with the IMCI strategy, especially in the assessment of the cardio-pulmonary system, as the IMCI strategy doesn’t cover this system.

The following are the responses of the participants during the interviews:

“.....with IMCI the challenges we have with cough and whatsoever we are not supposed to listen to the chest.....”

“.....we are not supposed to use the stethoscope with that really I think from our clinic that is supposed to be revised.....we have identified there is three or four children with cardiac problem and it was confirmed at the hospital.....we feel like we will miss something if we don't use a stethoscope... ”

“...IMCI is very difficult to implement especially if you are PHC trained because the minute you use IMCI then you confirm with your stethoscope....“

“.....if it was possible IMCI would be mixed with Health assessment treatment and care where you percuss, auscultate and use both skills at the same time .I think in that way it would be implemented...“

Although literature didn't confirm the combination of HATC principles with the IMCI strategy, there is literature that acknowledges the role of the stethoscope in the comprehensive assessment of an ill child. Literature confirms that the use of a stethoscope may improve the evaluation of a child with suspected pneumonia (Saloojee, 2007:174). Saloojee (2007:174) further indicated that tachypnoea alone is at best a sign of pneumonia and when used with a stethoscope there will be a positive likelihood ratio. Yet in a case study conducted by Mullei *et al.* (2008:39) in Kenya, the argument is raised that the IMCI strategy does not apply to certain clinical skills such as the use of a stethoscope, which could have been a better approach. This research result is therefore partially confirmed from literature.

3.4.3 Challenges external to the clinic impacting directly on IMCI strategy implementation

The final main category covers challenges that impact on the implementation of the IMCI strategy, but that are external factors pertaining to the mothers of children taken to the PHC facilities. In the following paragraphs mothers' preference and demand for medication as treatment regime versus health education is described, as well as mothers' preference to be consulted by specific professional nurses known to provide medication. The last sub-category is the mothers' behaviour to return an ill child to the clinic later than the initial request, as well as late in terms of closing time at the clinic.

3.4.3.1 Expectation of the mothers

The results with regard to the expectations of the mothers who visit the PHC facility with their child younger than five years is illustrated for clarity in figure 3.5 hereafter and will be discussed separately.

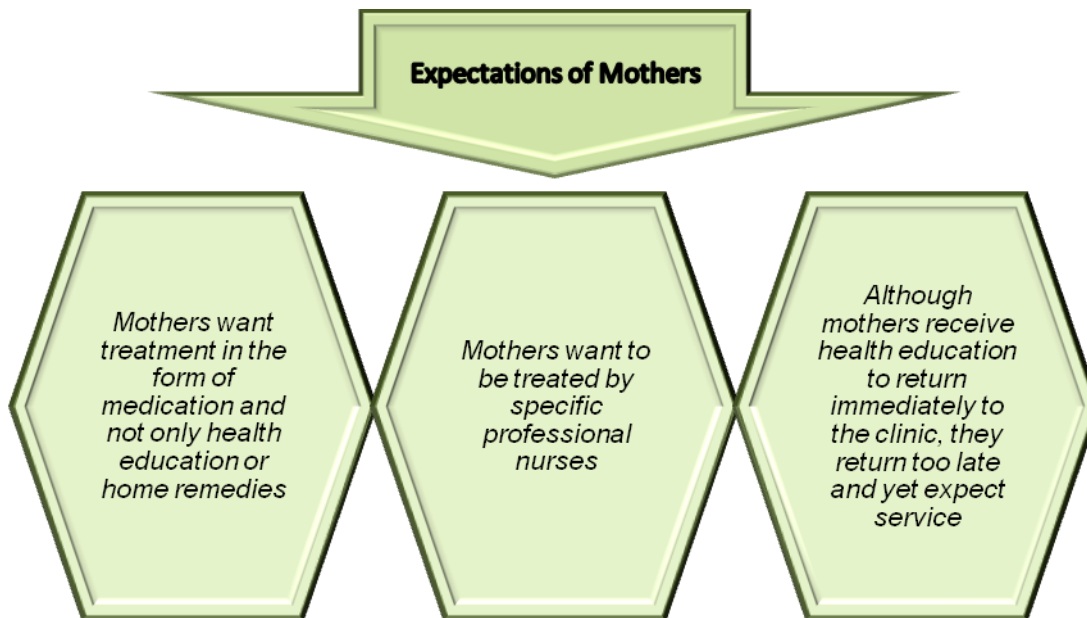


Figure 3.5: Expectations of the mothers

- ***Mothers want treatment in the form of medication and not only health education or home remedies***

The participants reported that mothers demand tangible treatment in the form of medication and not merely health education or home remedies. Mothers demand medication before leaving the consultation room. In addition, it was challenging to the participants not to dispense medication, but to provide only health education. The extent of the demand became visible when one participant explained that mothers threatened professional nurses with the media, saying that they will expose them for refusing to hand out medication that is supposed to be given to the community. Participants further explained that professional nurses that didn't hand out medication were regarded as "bad" and that the mother will go to another nurse who will issue the medication.

The following is how participants responded:

“.....maybe the baby is having flu or coughing....when you advise them to take safe remedies they are not comfortable they always want medication. “

“.....mothers of children have this mind-set that if you come to the clinic they will get treatment and this health education they are not really satisfiedthey don't believe in that.....”

“....mothers want treatment and they demand the treatment, the person will not leave the consulting room unless you give out treatment...”

“.....clients want treatment even if the child doesn't warrant to be given treatment, mothers will complain that some professional nurses give treatment and they are not treated the same....”

“....mothers will say this medication is for us why does they refuse to give us medication, I'm going to the newspaper and they threaten us....”

Mothers' expectation to receive tangible treatment and not only health advice was confirmed by Horwood *et al.* (2009a:6). In addition Vhurumu and Davhana-Maselesele (2009:66) confirmed the mothers' preference to leave the PHC facility with medication and their disapproval when they receive health education only. Mullei *et al.* (2008:41) agreed that mothers in PHC clinics expect treatment because giving health education was considered to be sub-standard and was not well received by mothers.

- ***Mothers want to be treated by a specific professional nurse***

This sub-category implied that participants were aware of colleagues who provide pharmacological treatment, although the IMCI strategy indicated that only education should be used. Mothers of ill children prefer to be consulted by the professional nurse known to provide medication at the end of the consultation session. The participants voiced that clinic managers will insist on dispensing at least a cough mixture to prevent the mothers from leaving the clinic empty handed with health education only. The following paraphrases confirmed the above discussion:

“.....with the cough or cold really the mothers become so angry.....they report that we are not giving them medication and the other sister gives them medication...”

“...so they become so angry as if we don't want to treat their children...”

“... the manager listens to the client and give cough mixture for cough or cold... and will ask what cough mixture used for in the clinic...”

Mullei *et al.* (2008:41) confirm that mothers prefer professional nurses that give treatment as one of the participants voiced that mothers go to those who inject as they like to be injected.

- ***Although mothers receive health education to return immediately to the clinic, they return too late and yet expect service.***

Another challenge reported by the professional nurses pertains to the immediate returning of an ill child. During an IMCI strategy consultation the mothers are educated on when to return to the clinic, be it immediately or when the child's symptoms worsened. They are given the signs to observe when the child must be returned to the facility. Yet the mothers tend to return the child to the clinic too late and then the child is very ill. In addition to returning when the child is already very ill, mothers tend to arrive at the clinic by closing time with a very ill child, expecting immediate service from the professional nurses. The following are the quotes from participants during interviews:

“.....the thing is with IMCI you need to educate the mother when to come back...”

“...when to return back immediately...”

“.....they stay until late when the child is worse....”

“.....you will be telling the mother to return when but the mother will stay.....she will be coming at four 'o clock.....with that very ill baby.”

The challenge reported by participants that mothers return their child too late when the child is very ill cannot be confirmed in literature and can be presented as a result unique to this study. Mothers returning with an ill child at closing time are confirmed only by

Vhuromu and Davhana-Maselesele (2009:66). These authors state that mothers return to the clinic late in the afternoon in order to get the treatment and to avoid being given health education.

3.4.3.2 Insufficient information provided about children younger than 5 due to the absence of the mother

The one-on-one interviews with the professional nurses also refer to an important aspect namely that the person who brings the child younger than 5 years to the PHC facility tend not to know the child well enough to give sufficient info regarding the child's health status or that of the mother during assessment.

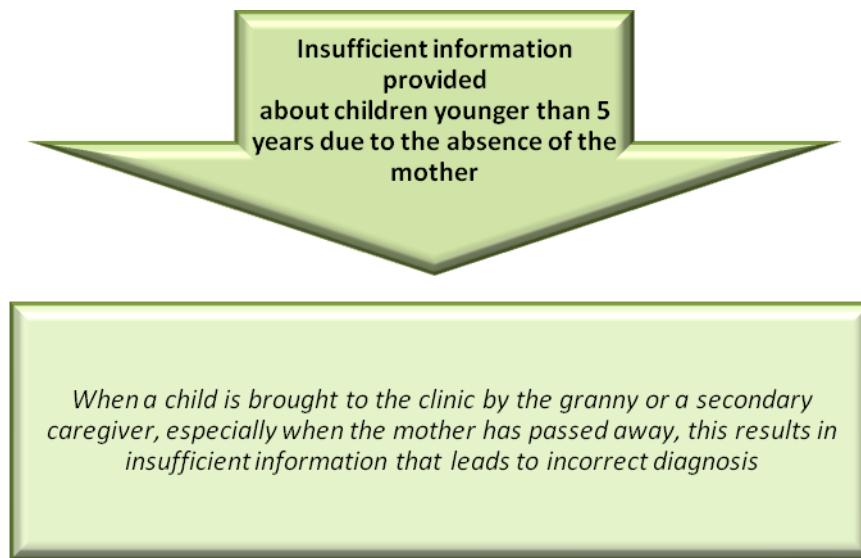


Figure 3.6: Insufficient information provided about children younger than 5 years due to the absence of the mother

In the final category and sub-category participants indicated their frustration when the children were brought to the clinic by someone not familiar with the child and not by the child's mother or the most knowledgeable person like the granny looking after the child. Furthermore, participants stated that some mothers who are HIV-positive don't bring their children to the PHC facilities, fearing that they will have to give permission for the child's HIV status to be tested. One participant verbalised that if the child is brought by the granny or a secondary caregiver, especially when the mother had passed away, this

results in insufficient information that could lead to the incorrect classification on the IMCI strategy. The direct reports from the participants are as follows:

“.....the mothers are already deceased the babies will be brought by the grannies.....so we don't get enough information.” ...” maybe the granny does not know that the mother was HIV positive..... “

“.....some mothers if they know that they are HIV positive they sent somebody to bring the child, this child need to be tested and as a professional nurse you fail.....”

“.....maybe the mothers are HIV positive they won't feel free to say that.....they always run away from the point...”

Limited confirmation was found in literature with regard to this category and sub-category. Horwood *et al.* (2009a:316) confirm that HIV and Aids are always a challenge because the child comes to clinic with multiple carers. Horwood (2009a:316) further confirm that mothers complain when their children are assessed for HIV on every visit, and this leads to mothers avoiding the clinic.

3.5 SUMMARY

In chapter three the realisation of data collection and data analysis was described. Thereafter the research results were discussed with literature integration. The discussion of the research results will be consolidated in concluding statements in chapter four.

CHAPTER 4

EVALUATION OF THE STUDY, LIMITATIONS AND RECOMMENDATIONS

4.1 INTRODUCTION

In the previous chapter the realisation of data collection and data analysis were discussed, followed by the research results with literature integration. In this chapter concluding statements are formulated. Thereafter, an evaluation of the study was done followed by a discussion of the limitations. Recommendations were formulated for nursing practice, education and research to enhance the implementation of the IMCI strategy by professional nurses in PHC facilities in the Matlosana sub-district in the North West Province.

4.2 CONCLUDING STATEMENTS

The following concluding statements are formulated from the research results and literature integration:

- Despite various challenges, the role of the IMCI strategy as a functional and appropriate tool to assist professional nurses to classify and manage the health of children younger than five years at PHC facilities outweighs the challenges that impact on its implementation. The role of the IMCI strategy is also portrayed by the MDGs' claim that the IMCI strategy is necessary to decrease the prevalence of child morbidity and mortality rates.
- The challenges that impact on the implementation of the IMCI strategy faced by professional nurses are real. Yet overcoming these challenges implies a long term venture as the implementation of the IMCI strategy runs parallel with international and national challenges impacting on the health care systems in South Africa. The context in which IMCI strategy implementation is positioned internationally is within South Africa's inability to reach the MDGs target by 2015. Nationally, IMCI strategy implementation is positioned within a context of striving to make health care more equal, available, accessible and affordable through PHC.

- There are various role players and stakeholders associated with the challenges to implement the IMCI strategy. The role players are the professional nurses responsible for implementing the IMCI strategy, the facility managers, the mothers and care givers, as well as the recipients of the IMCI strategy, which are the children younger than five years and the community at large. The stakeholders associated with the implementation of the IMCI strategy are the national DoH for directing the implementation of IMCI and providing the IMCI strategy materials; the provincial DoH that coordinates the implementation of the IMCI strategy; the district DoH that is responsible for the realisation of the IMCI case management course and the sub-district DoH that is responsible for the implementation of the IMCI strategy. Another stakeholder is the Nursing Education Institutions (NEIs) that is responsible to integrate the IMCI strategy in their curricula.
- Although this study didn't focus on the community-based aspects of the IMCI strategy, the burden experienced by professional nurses in PHC facilities regarding the high volumes of patients in need of care might be due to the lack of knowledge from mothers (also applicable to primary care givers) and the lack of education to these mothers on home remedies. When mothers are educated and follow-ups made during home visits on the IMCI strategy they might have better insight into the management suggested by this strategy, whether it is in the form of education, home remedies or pharmaceutical intervention.
- The impact of a limiting physical structure that prevents privacy and confidentiality, as well as sufficient space for assessment of the child under five years, is detrimental for the IMCI strategy, as this strategy includes HIV assessment.
- The international and national shortage of health care professionals is evident, also in the lack of trained staff to implement IMCI strategy at PHC facilities in the Matlosana sub-district in the North West Province.
- The recording form should be completed as part of the IMCI strategy and this implies that the professional nurses have to conduct double writing in the current documentation process in PHC facilities. The recording form plays a similarly important role in the comprehensive management of the child during referrals.
- The professional nurses tend not to adhere to the IMCI strategy algorithms, which ensure a comprehensive view of the patient.
- The integration of the IMCI strategy is compromised due to the combination of PHC principles with the IMCI strategy principles.

4.3 EVALUATION OF THIS STUDY

The evaluation of this study is a reflection of the significance of this study topic, the process of reaching the research aim and objectives and gives critical feedback on the central theoretical statement and the appropriateness of the research methodology.

In summary the research topic was to investigate the challenges professional nurses experience in implementing the IMCI strategy in PHC facilities as a mechanism to reduce the morbidity and mortality rates of children younger than 5 and to improve their quality of life. The significance of the research topic is confirmed by the background and problem statement of this research study, as formulated in Chapter 1. The ample feedback of professional nurses in the data collection serves as an indication of the significance of this research topic. Furthermore, the literature integration confirmed the possible needs for further research on this research topic.

The research aim and objectives were reached at the completion of this study. The main aim of this research was to enhance the implementation of the IMCI strategy through a better understanding of the challenges involved. The objectives were to explore and describe the challenges facing nurses working in a PHC facility regarding the implementation of the IMCI strategy and to make recommendations to enhance IMCI strategy implementation in PHC facilities by professional nurses. The researcher did gain a better understanding of the challenges to implement the IMCI strategy. The exploration and description of the challenges to implement the IMCI strategy resulted in three main- and seven sub-categories that were described and discussed with literature integration. In the following paragraphs recommendations are formulated for nursing education, nursing research and nursing practice.

The central theoretical statement was that the exploration and description of the challenges impacting on the implementation of the IMCI strategy by professional nurses working in PHC facilities in the Matlosana sub-district can enhance the implementation of the IMCI strategy and improve the quality of the health care of children younger than

5 years. As the research aim and objectives were obtained, the researcher concluded that the central theoretical statement was true.

The utilisation of a qualitative research design and the conduction of individual interviews were appropriate. Although the researcher initially planned focus groups and had to resolve to conduct individual interviews, the research results were sufficient for discussion and literature integration.

4.4 LIMITATIONS IN THIS STUDY

The following limitations are identified in this study:

- The mothers of the children could have provided valuable information about the challenges in implementing the IMCI strategy as this would have been a unique point of departure, although this was not the focus of this research.
- Due to the shortage of staff the researcher struggled to conduct focus group interviews and had to resort to individual interviews.
- The researcher had to conduct interviews during time periods when the clinic was quiet, implying that the majority of interviews were conducted in community health centers as these centers are open and functional after hours. Although the community health centers implement the IMCI strategy, the research results might have been enriched if more primary health care facilities were participating.
- If observation was part of data collection the researcher could have had rich and valuable data.
- The research was done only in the Matlosana sub-district and does not represent the challenges of IMCI strategy implementation in the whole of the Dr. Kenneth Kaunda district, so the findings cannot be generalised.

4.5 RECOMMENDATIONS

Recommendations to enhance the implementation of the IMCI strategy by professional nurses in PHC facilities in the Matlosana sub-district are formulated regarding education of professional nurses, research and the community health practice. The recommendations follow below.

4.5.1 Recommendations for nursing education

- With regard to the IMCI strategy in the nursing curriculum, the following recommendations are made:
 - Nursing education institutions (NEIs) should integrate the IMCI strategy into the basic nursing education curriculum to start with this important component of PHC services early in the professional nurse's training.
 - The IMCI case management course should be conducted over a period of 4 years during the basic training of student nurses. It should be presented in such a manner that the theory and practice link is facilitated.
 - NEIs should reach consensus about IMCI strategy training with regard to the current 11 days training and the consequent possibility of the lack of implementation of the strategy towards a longer and integrated programme.
- Learners should be exposed to primary health care facilities more to practice and be able to manage this strategy when they become professional nurses.
- Posts should be created for preceptors who will precept the learners when they are in the clinical facilities for them to internalise and master this strategy for easy implementation when they are professional nurses.

4.5.2 Recommendations for research

The following research problems are presented for further research:

- The knowledge, attitude and perceptions of mothers or the caregivers (knowledgeable other) on the urgency related to when to return to the PHC facility apart from the follow-up instructions of the IMCI strategy should be investigated.
- A similar study should be conducted in all the districts and provinces to identify possible correlation between the challenges experienced and influence the policy makers on the shortage of staff and lack of medicine.
- Further research should be done to explore the reasons why the mothers of the child under 5 years are reluctant towards health education and prefer medicine to help the professional nurse to understand the phenomena.
- New inventive ways that can be a mix between the IMCI strategy with HTAC (Health Assessment Treatment and Care) should be explored to identify best practices applicable to the context of the PHC facility and the mothers of the child under 5 years.

4.5.3 Recommendations for community health practice

- The findings of this research indicate that the community is unfamiliar with the IMCI strategy so the household and community component should be strengthened through involvement and educating the community through a vehicle like the PHC re-engineering program.
- Home visits by community health nurses should thus be strengthened and be in place for them to be available to support and mentor the community when implementing the household and community component, as this will relieve the facilities from overcrowding for problems that could have been managed at home.
- Support groups should be considered to strengthen the importance of health education to the mothers and/or the caregivers of the child under 5 years within the implementation of the IMCI strategy to decrease the demands on medicine where it is not necessary.
- Mothers should be educated on the importance of follow-up and returning the child immediately if the mother observes certain signs as it is crucial to avoid further complications in the child.

4.6 SUMMARY

The main aim of this research was to enhance the implementation of the IMCI strategy through a better understanding of the challenges involved and was achieved by exploring the through personal in-depth interviews.

The researcher has reached the objective of this study as challenges facing professional nurses in the PHC setting was explored and described. From the rich data given by the participants, categories and sub-categories emerged. These research findings and recommendations will contribute to the improvement of the IMCI strategy, which will improve the mortality and morbidity rate of children younger than 5 years.

Despite the challenges faced by PHC nurses regarding IMCI strategy, the professional nurses in the facilities are trying their best to implement this strategy if the challenges faced can be attended to. This includes training more professional nurses and educating the community about this strategy to improve the quality care to children younger than 5 years. If all the stakeholders can be involved and be committed for IMCI strategy to be implemented the Millennium Development Goals can be reached by 2015. This will imply that the mortality rate of children younger than 5 years will be reduced. Finally, recommendations were made for nursing education, nursing research and nursing practice. Nursing practice includes the community and PHC clinics where the IMCI strategy is implemented.

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ANC **see** African National Congress

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ADDENDUM A

Ethical approval



Private Bag X6001, Potchefstroom
South Africa 2520

Tel: (018) 299-4900
Faks: (018) 299-4910
Web: <http://www.nwu.ac.za>

ETHICS APPROVAL OF PROJECT

Ethics Committee
Tel: +27 18 299 4850
Fax: +27 18 293 5329
Email: Ethics@nwu.ac.za

This is to certify that the next project was approved by the NWU Ethics Committee:

Project title : Challenges of nurses in a PHC setting regarding Implementation of Intergrated Management of Childhood illnesses	
Student	M.M.Y. MALESHANE - 11717785
Project leader:	Dr. MJ Watson
Ethics number:	NWU-00058-11-A1
<small>Legend: S = Submission; R = Re-Submission; P = Provisional Authorization; A = Authorization</small>	
Expiry date: 2016/07/26	

The Ethics Committee would like to remain at your service as scientist and researcher, and wishes you well with your project. Please do not hesitate to contact the Ethics Committee for any further enquiries or requests for assistance.

The formal Ethics approval certificate will be sent to you as soon as possible.

Yours sincerely



Me. Marietjie Haignyn
NWU Ethics Secretariate

ADDENDUM B

Request to conduct research from Matlosana sub-District

1642 Phenyeke Street

Kanana Location

Orkney

2619

Cell Number (0761144337)

30/05/2011

Mrs.Zarina Motala

Sub District Manager

Matlosana

Madam

REQUEST FOR PERMISSION TO CONDUCT RESEARCH IN MATLOSANA SUB DISTRICT

I am currently registered for a Masters Degree (Community Nursing) at the North-West University (Potchefstroom Campus). As part of the degree I should conduct research and I plan **to explore and describe the challenge that nurses in the primary health care (PHC) setting experience regarding the implementation of Integrated Management of Childhood Illnesses (IMCI).**

In order to achieve this objective, interviews by means of unstructured individual interviews and focus groups will be conducted with professional nurses working in PHC facilities rendering care to children under the age of 5 years. These PHC nurses should be working in Health Care Centers positioned in the Matlosana sub district.

The inclusion criteria for prospective participants are as follows:

- professional nurses working in a PHC facility rendering care to children under the age of 5 years;
- they should have at least worked one (1) year in a PHC facility after qualifying as a professional nurse;
- must be a professional nurse registered as a general nurse and midwife with the South African Nursing Council (SANC);
- should be able to speak English; and
- should be willing to participate voluntary.

The interviews for those who agree to participate will be conducted during July and August 2011 at the facilities where the participants are working. The interviews will last approximately 45 minutes to an hour, be digitally voice-recorded and confidentiality will be ensured for all the participants and all research proceedings.

Please note that I have also submitted a request for ethical clearance to the Ethics Committee of the North-West University and awaits the ethics clearance certificate. Application number is NWU-00058-11-S5. I will forward this ethics clearance certificate to you as soon as I receive it. To ensure optimal time management I have decided to inform all the key role players essential for ethical clearance and consent simultaneously.

Your timeous response will be appreciated as I will be able to make further arrangements.

Thanking you in anticipation

M.M.Y.Maleshane (Researcher)



Dr.Mada Watson (Study Leader)



Dr Petra Bester (Co-Study Leader)

ADDENDUM C

Request to conduct research from North West Province DoH

1642 Phenyeke Street

Kanana Location

Orkney

2619

Cell Number (0761144337)

30/05/2011

Mr. K. Rabanye
Directorate Policy, Planning and Research
North-West Department of Health

Dear Mr Rabanye

REQUEST FOR PERMISSION TO CONDUCT RESEARCH IN MATLOSANA SUB DISTRICT

I am currently registered for a Masters Degree (Community Nursing) at the North-West University (Potchefstroom Campus). As part of the degree I should conduct research and I plan **to explore and describe the challenges that nurses in the primary health care (PHC) setting experience regarding the implementation of Integrated Management of Childhood Illnesses (IMCI).**

In order to achieve this objective, interviews by means of unstructured individual interviews and focus groups will be conducted with professional nurses working in PHC facilities rendering care to children under the age of 5 years. These PHC nurses should be working in Health Care Centers positioned in the Matlosana sub district.

The inclusion criteria for prospective participants are as follows:

- professional nurses working in a PHC facility rendering care to children under the age of 5 years;
- they should have at least worked one (1) year in a PHC facility after qualifying as a professional nurse;
- must be a professional nurse registered as a general nurse and midwife with the South African Nursing Council (SANC);
- should be able to speak English; and
- should be willing to participate voluntary.

The interviews for those who agree to participate will be conducted during July and August 2011 at the facilities where the participants are working. The interviews will last approximately 45 minutes to an hour, be digitally voice-recorded and confidentiality will be ensured for all the participants and all research proceedings.

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Your timeous response will be appreciated as I will be able to make further arrangements.

Thanking you in anticipation

M.M.Y.Maleshane (Researcher)



Dr.Mada Watson (Study Leader)



Dr Petra Bester (Co-Study Leader)

ADDENDUM D

Permission granted to conduct research in sub-District Matlosana



health

Department of
Health
North West Province
REPUBLIC OF SOUTH AFRICA

4th Floor West End Building
Klerksdorp
Private Bag A2
Klerksdorp, 2570

Tel: (018) 464 2210
Fax: (018) 464 2512
zmotala@nwpg.gov.za
zmotala@nwpg.gov.za

MATLOSANA SUB DISTRICT

TO: MS MMY MALESHALE
RESEARCHER

FROM: MRS Z MOTALA
PHC MANAGER
MATLOSANA SUB DISTRICT

DATE: 22/12/2011

**SUBJECT: REQUEST FOR PERMISSION TO CONDUCT RESEARCH IN
MATLOSANA SUB DISTRICT.**

Dear Madam

The above subject has reference.

Approval is hereby granted to you to conduct a research in PHC facilities in Matlosana Sub District as requested.

Please indicate to this office the starting date of your research at the facilities.


Hope you find the above in order.

Kind regards

Me Z Motala
PHC Manager
Matlosana Sub District

ADDENDUM E

Permission granted to conduct research in North West Province-DoH

 **health**
Department of
Health
North West Province
REPUBLIC OF SOUTH AFRICA

2ND Floor Tirolo Building
Dr. Albert Luthuli Drive
Mafikeng, 2745
Private Bag X2068
MMABATHO, 2735

Tel: (018) 387 5757
kshogwe@nwp.gov.za
www.nwhealth.gov.za

POLICY, PLANNING, RESEARCH, MONITORING AND EVALUATION

To : Ms M.M. Maleshane

From : Policy, Planning, Research, Monitoring & Evaluation

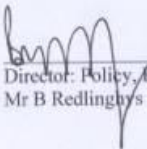
Subject: Research Approval – Challenges of Nurses in a PHC Setting Regarding Implementation of Integrated Management of Childhood Illnesses.

Purpose

To inform your good selves that permission to undertake the above mentioned study has been granted by the North West Department of Health. The researcher is expected to issue this letter as prove that the Department has granted approval to the districts or health facilities that form part of the study.


Arrangements in advance with managers at district level or facilities shall be facilitated by the researcher and the department expects to receive the final research report upon completion.

Kindest regards


Director: Policy, Planning, Research, Monitoring & Evaluation
Mr B Redlinghys

5/12/11
Date

1


Healthy Living for All

ADDENDUM F

The research information letter and voluntary consent granted by participants

CONSENT TO BE A PARTICIPANT

Mrs. Maleshane is conducting a study on challenges faced by PHC nurses regarding implementation of Integrated Management of Childhood Illnesses. Unstructured interviews will be conducted to try and explore your experiences regarding IMCI implementation.

The objective of the research is To explore and describe the challenges faced by the nurses working in a PHC facility regarding the implementation of the IMCI strategy.

In order to achieve this objective unstructured interview will be conducted with PHC nurses that are rendering care to children under 5 years. Interviews will be conducted at the clinics where the participants are working and will last for 45 minutes to an hour. Confidentiality will be ensured for all the participants and research proceedings.

THE RIGHTS OF PARTICIPANTS

Your participation in this study is voluntary and you can refuse to participate or you can decide to stop at any stage of the study. Refusing to participate will involve no loss of benefits or penalty. The results of the study will be provided to you on request.

RISK OF DISCOMFORT

There are no risks involved with this study the study will not include any experiments. Researcher will ensure that you are free from any discomfort and harm.

CONFIDENTIALITY

Information obtained from this study will be kept confidential. Your records will be handled as confidential as possible. Only Mrs. Maleshane will have access to your research records. No individual identification will be used in any reports or publication

resulting

from

this

research.

BENEFITS

There will be no benefit to you from participating in this study. Your participation will help the researcher to formulate recommendation in IMCI implementation in order to reduce the mortality rate of children under 5 years.

PAYMENT

There will be no payment for your participation. Transportation cost will be reimbursed.

QUESTIONS

You have talked to Mrs. Maleshane about this research and have had your questions concerning the consent answered. If you still have further questions, feel free to ask Mrs. Maleshane or call her at 018 406 8600.

CONSENT

You will be given a copy of this consent to keep.

PARTICIPATION IN THIS RESEARCH IS VOLUNTARY. You are free to decline to be in this research or to withdraw from it at any time. Your decision as to whether or not to participate in this research will have no influence on your present or future employment of the health services.

Thanking you in anticipation

SIGNATURE OF STUDY PARTICIPANT

DATE

SIGNATURE OF PERSON OBTAINING CONSENT

DATE

ADDENDUM G

EXERT OF A TRANSCRIPTION OF AN INTERVIEW WITH A PROFESSIONAL NURSE IN A PHC FACILITY

INTERVIEW WITH PROFESSIONAL NURSE NO. 1

R-RESEARCHER

P-PARTICIPANT

R	Ok Mam I'm sure I've exhausted all the questions that I wanted to ask before coming to the main question. Then my main question is "What are the challenges that you are facing as PHC nurses regarding IMCI implementation?"	
P	Disturbance..knock on the door. The first one is time consuming Then shortage of staff Also lack of skill and experience Use of PHC style.PNs mix IMCI with a stethoscope	
R	Ok Mam you talked about time consuming, can you elaborate more on that and explain why do you say IMCI is time consuming	
P	Yes Mam it takes time to assess one child using IMCi. Ehh ! !One child you take 2 hours whilst other clients are waiting outside.At knock off time you haven't completed all children who came to the clinic.	
R	Hmm. . . What do you do then if children are still waiting	
P	We help each other to complete all those children	
R	Ok. besides this one can you explain to me more, when you talked about shortage of staff	
P	This is a real challenge because the number of staff as compared to clients, doesn't allow us to implement some programmes like IMCI properly as you are looking at the line and you want to push it so that by knock off time people are all seen	
R	Don't you think it's better to do something thorough unlike to push a line.	
P	Mam, you don't understand the clients' they even scold on us if they take a long time waiting.	
R	Ok, You also talked about lack of skill and experience. Can you tell me	

	more about this and what do you mean	
P	Oh. . . this one it's a real problem because if you are not dealing with kids frequently you actually forget IMCI. The newly qualified PNs they need a mentor but because all of us will be busy you help where you can.	
R	Which means the newly qualified Pns are left alone? Can you clarify .It seems as If I don't understand	
P	She will work under supervision of an old PN, but if we are too busy then she start being independent for her to learn.	
R	Ok. You said something like use of PHC style and using a stethoscope	
P	IMCI is very difficult to implement especially if you are PHC trained because the minute you use IMCI then you confirm with your stethoscope.	
R	Hmmm. . .Is it not confusing especially the newly qualified PNs .	
P	Mam what I can tell you they end up using a stethoscope also. So its really a problem to implement pure IMCI because somewhere somehow it seems as if it's not complete especially to us the PHC trained nurses.	
R	Ok. It becomes interesting now, If you say it's not complete what do you actually mean.	
P	Mam if it was possible IMCI would be mixed with Health assessment treatment and care where you percuss, auscultate and use both skills at the same time .I think in that way it would be implemented.	
R	Is it not going to take a longer time unlike if its IMCI purely.	
P	No.no.. .I don't think so .But it needs to be reviewed.	
R	(Summary of what was discussed) Ok sister. Thanks for your time and information .For me it was valuable for my study. Whatever that I need to be clarified on whatever that we have talked about, I will always come back.	
P	Thanks Mam I hope your study will make a difference in our clinics	

ADDENDUM H

FIELD NOTES COMPILED FROM INDIVIDUAL INTERVIEWS

PHC NURSE 1

Descriptive notes

The participant was a middle aged man of about forty years. He worked in the clinic for four years. He is IMCI trained and also a newly qualified advanced midwife. He had a positive attitude and was eager to participate and give information about IMCI. The room was quiet and cell phones were put off and we were disturbed by a health worker who wanted something in the cupboard. The researcher encouraged the participant to relax and give her of all the challenges faced by PHC nurses about IMCI implementation. The interview was held in the duty room of the clinic.

Methodological notes

The environment where interview took place was conducive and there was a note of no disturbance on the door. The room was well prepared with adequate lighting and chairs to sit and work. The noise was very minimal from the other site. The interview went well and researcher explained what is expected from the participant.

Personal notes

Both the researcher and participant were relaxed. Participant had a warm welcome. He was ready for the appointment when the researcher arrive .The clinic was not busy. and the participant asks permission from his colleague to be given a chance to sit with the researcher for an interview.

Demographic notes

The interview was held in the clinic at 15:00. It was hot and later on it started to drizzle. The interview lasted for 25 minutes

PHC NURSE 2

Descriptive notes

The participant was a middle aged woman of 49 years. She has been working as a professional nurse for three years. When we started with the interview it was as if she was not sure of what she said and she became relaxed as we progressed with the interview. She is a soft spoken and shy person and didn't want to maintain eye contact with the researcher. The researcher encouraged her to feel free and relax and give honest information that she knows with challenges regarding IMCI implementation. Probing was done successfully and no disturbance experienced. She is IMCI trained.

Methodological notes

The interview was held at the participant's home as she was off and she preferred to be interviewed at home. Other members of the family were explained the purpose of the visit and were urged not to disturb. The interview was held in the study room, it was quiet and atmosphere was conducive. Cell phones of participant and researcher were switched off. The researcher encouraged the participant to talk freely.

Demographic notes

The interview was held at the participant's home on the 01/02/2012 at 13:30. The interview lasted approximately 20 minutes. It was warm and a fan was used to cool the atmosphere..

PHC NURSE 3

Descriptive notes

The participant was an elderly woman of about fifty three years. She has been working in this clinic for fifteen years. She was prepared to participate as she has been waiting for me and she prepared the venue where the interview will take place. She appeared to be knowledgeable about IMCI challenges but could not express her views accordingly. Probing was used to come up with more challenges. She is IMCI trained and also having health assessment treatment and care.

Methodological notes

The interview took place at the participant's home. She was off duty and invited me to her house for interview though it was not an initial arrangement. There were children but were explained about the purpose of the visit. There was a bit of noise from a distance from children playing but it did not interfere with our conversation.

Demographic notes

The interview was held at the participant's home on the 01/02/2012 at 18:00. It lasted for 22 minutes. The weather was cool and conducive for both the participant and the researcher. There were children playing when the researcher arrived but the participant explained to them the reason of my visit and they agreed to give us a chance to finish with the interview. The interview went well without any disturbances.

PHC NURSE 4

Descriptive notes

She was a young lady of 35 years, a bit overweight but very friendly. It was during the night and a bit cold outside as it was drizzling. It was in the clinic but very quiet with one woman post-delivery. The nurse have been working in this clinic for seven years, she is IMCI trained but only practice it when allocated to deliver service to children. There was a disturbance on the door from a cleaner who wanted something in the cupboard. From there it was quiet until the interview finish.

Methodological

The interview was conducted at the clinic during the night. Appointment was honoured only on the basis that it was not busy and researcher was returned several times due to the clinic that was busy. It was still quiet and the cleaners were busy cleaning but they were explained about the interviews and not to disturb.

Demographic notes

The interview was held on the 04/02/2012 in the clinic where the participant is working. The interview took place during the night at 21:00 and the professional nurses where only two on duty and an assistant nurse. When the researcher arrived at the clinic, the participant was still busy with a client so I had to wait for her to finish before we can start with the interview.

ADDENDUM I
Declaration of language editing

CUM LAUDE LANGUAGE SERVICES

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DECLARATION OF LANGUAGE EDITING

I, Christina Maria Etrechia Terblanche, id nr 771105 0031 082, hereby declare that I have edited the dissertation of Ms Yvonne Maleshane, entitled *Challenges of nurses in a PHC setting regarding the implementation of IMCI*, without viewing the final product.

Regards,

CME Terblanche

Director: Cum Laude Language Practitioners (CC)