

**PERCEPTIONS OF THE R48 PRIMARY HEALTH CARE TRAINED NURSES
REGARDING THE IMPLEMENTATION OF EXPANDED PROGRAMME OF
IMMUNIZATION IN TSHWANE DISTRICT.**

by

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I declare that the above dissertation/thesis is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

A handwritten signature in black ink, appearing to read 'Mashikanya', with a large, stylized initial 'M'.

07/11/2017

SIGNATURE

DATE

DEDICATION

I dedicate this study to:

The Almighty God who sustained me throughout the challenges I had in my years of study, my beloved mom Violet Mashianoke Makgalemele, my children Mogajane, Matlapetja, Mokgadi, and Mashianoke for their unconditional love and support till completion of the study.

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“It is Impossible until it is done”

(Nelson Mandela)

PERCEPTIONS OF THE R48 TRAINED PROFESSIONAL NURSES REGARDING THE IMPLEMENTATION OF EXPANDED PROGRAMME OF IMMUNIZATION IN TSHWANE DISTRICT.

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ABSTRACT

PURPOSE: The purpose of the study was to explore the perception of the R48 trained professional nurses with regard to implementation of the EPI in Tshwane District Gauteng Province.

METHODOLOGY: A qualitative research design was followed. Data were collected through in-depth qualitative interviews from a purposive sample of eight (8) R48 trained professional nurses. Eight steps of Tech's inductive, descriptive open coding technique was followed.

FINDINGS: The study established that EPI programme is important in R48 training. The implementation of integrated approach was viewed as beneficial leading to the reduction of diseases. The successful implementation would be more beneficial if it is consistently coupled with support from programme managers and regular in-service on up-dates of new vaccines and technologies are introduced within the programme

KEY WORDS: Immunization, implementation, R48 trained professional nurses, expanded immunization programme

Table of Contents

DEDICATION iii

ACKNOWLEDGEMENTS..... iv

ABSTRACT vi

CHAPTER 1 1

ORIENTATION TO THE STUDY 1

1.1 INTRODUCTION 1

1.2 BACKGROUND 4

1.3 STATEMENT OF THE RESEARCH PROBLEM 6

1.4 AIM OF THE STUDY 6

 1.4.1 Research purpose 6

 1.4.2 Research objectives 6

1.5 SIGNIFICANCE OF THE STUDY 7

 1.5.1 Significance to health care providers..... 7

 1.5.2 Significance to patients 7

 1.5.3 Significance to the policy makers 7

1.6 DEFINITIONS OF KEY CONCEPTS 8

1.7 METHODOLOGY 9

 1.7.1 Qualitative exploratory design 10

1.8. TRUSTWORTHINESS 10

 1.8.1 Credibility..... 11

 1.8.2 Transferability..... 11

 1.8.3 Dependability..... 12

 1.8.4 Confirmability..... 12

1.9 ETHICAL CONSIDERATIONS 13

 1.9.1 Beneficence..... 13

 1.9.2. Respect for human dignity 14

 1.9.3 Justice 14

 1.9.4 Privacy 14

 1.9.5 Self-Determination..... 14

1.10 STRUCTURE OF THE DESSERTATION..... 15

1.11 CONCLUSION..... 15

CHAPTER 2 16

LITERATURE REVIEW 16

2.1 INTRODUCTION	16
2.2 PERCEPTIONS OF THE PRIMARY HEALTH CARE TRAINED NURSES	18
2.3 HEALTH CARE DELIVERY SYSTEM IN SOUTH AFRICA	19
2.3.1 The National Level	20
2.3.2 The Provincial level	21
2.3.3 The District level.....	22
2.4 SERVICES TO CHILDREN	22
2.4.1 Expanded Programme on Immunization (EPI)	22
2.4.2 School health services	24
2.4.3 Integrated management of childhood illnesses	24
2.5 Conclusion.....	25
CHAPTER 3	27
METHODOLOGY	27
3.1 INTRODUCTION	27
3.2 RESEARCH METHODOLOGY	27
3.3 RESEARCH DESIGN	27
3.3.1 Qualitative research	28
3.3.2 Qualitative exploratory research.....	28
3.3.3 Qualitative descriptive research	28
3.4 RESEARCH METHOD	29
3.4.1 Population	29
3.4.2 Sample	29
3.4.3 Sampling	29
3.5 DATA COLLECTION	30
3.6 DATA MANAGEMENT AND ANALYSIS	30
3.6.1 Data management.....	31
3.6.2 Data analysis.....	33
3.7 TRUSTWORTHINESS	35
3.7.1 Credibility.....	35
3.7.2 Transferability.....	35
3.7.3 Dependability.....	35
3.7.4 Confirmability.....	35
3.8 ETHICAL CONSIDERATION.....	36
3.8.1 Respect for Autonomy.....	36

3.8.2 Beneficence.....	36
3.8.3 No maleficence.....	36
3.8.4 Justice	37
3.8.5 Ethical clearance	37
3.8.6 Permission to conduct research	37
3.8.7 Informed consent.....	37
3.8.8 Voluntary participation.....	38
3.8.9 Scientific integrity of research.....	38
3.9 CONCLUSION.....	38
CHAPTER 4	39
ANALYSIS, PRESENTATION AND DESCRIPTION OF THE RESEARCH FINDINGS	39
4.1 INTRODUCTION	39
4.2 BIOGRAPHIC DATA OF PARTICIPANTS.....	39
4.3 FINDINGS	40
4.4 DISCUSSION OF THEMES, SUB-THEMES	40
4.5 DATA SATURATION	63
4.6 CONCLUSION.....	63
CHAPTER 5	65
CONCLUSIONS, IMPLICATIONS, RECOMMENDATIONS AND LIMITATIONS OF THE STUDY	65
5.1 INTRODUCTION	65
5.2 CONCLUSIONS OF THE STUDY	65
5.2.1 Purpose of the study	66
5.2.2 Research questions.....	66
5.2.3 Research objectives	66
5.2.4 Methodology.....	66
5.2.5 Findings of the study	67
5.3 IMPLICATIONS OF THE STUDY	71
5.3.1 Nursing practice	71
5.3.2 Nursing education	72
5.3.3 Nursing research	73
5.4 LIMITATIONS OF THE STUDY	74
5.5 RECOMMENDATIONS	74
5.6 CONCLUSION.....	77

List of Tables

Table 1: Themes and Subthemes.....40

CHAPTER 1

ORIENTATION TO THE STUDY

1.1 INTRODUCTION

'Immunity', according to Lancaster and Stanhope (2014:480) is the characteristic of a host that may influence the spread of disease and infectiousness of the host. 'Resistance' is the ability of the host to withstand infection, and it may involve natural or acquired immunity. 'Acquired immunity' is the resistance acquired by a host because of previous natural exposure to an infectious agent. For example, having measles once protects against future infection. Acquired immunity may be induced by active or passive immunization. 'Active immunization' refers to the immunization of an individual by the administration of an antigen (infectious agent or vaccine), and is characterised by the presence of an antibody produced by the individual host. Vaccinating children against childhood diseases is an example of inducing active immunity.

Expanded Program on Immunization is one essential part of the comprehensive approach that targets the population of 13years and younger as well as pregnant women.

According to Van Rensburg (2014:30), the global community adopted the model of comprehensive primary health care approach, which served as a major mechanism for health system reform worldwide. This model was endorsed through the Alma Ata Declaration, 1978.

South Africa has since adopted and implemented the Primary Health care program when deviating from the expensive and non-accessible secondary level of care for most of its communities in relation with the Alma Ata Declaration of 1978. Van Rensburg (2012: 27) states that the WHO adopted the slogan "Health for all", which was adopted by countries including South Africa in order to make health care accessible to all communities.

In the quest to implement the primary health care approach, integrated programmes have been developed to manage health problems that should contribute to reduction of mortality and morbidity especially of the under-five age group. It is therefore the responsibility of all stakeholders to implement programmes such as Expanded Programme on Immunization (EPI) at the preventative level of care.

According to Stanhope and Lancaster (2014:277) a program is an organized approach to meet the assessed needs of individuals, families, groups or communities by reducing or eliminating one or more health problems, e. g. immunization program is intended to reduce the effects of vaccine preventable diseases and malnutrition on the under-five age group. Immunization program is the most cost-effective method for preventing and controlling communicable diseases in both children and adults who are at high risk of infection.

In South Africa, the National Department of Health introduced the Expanded Program on Childhood immunization (EPI) in 2000. Setswe, Naude' and Zungu (2011: 255) outline that nursing interventions regarding immunization should include the following:

- Health education of individuals and the community about the importance of immunization in providing immunity and preventing communicable diseases
- Identification of missed opportunities and referral of clients for immunization services
- Providing immunization services in schools and in communities using mobile clinics
- Advocating for assessment of immunization services for the communities in need.

Success of this initiative calls for effective program planning, which will benefit clients, nurses, employing agencies and the community, and will reduce role ambiguity by giving responsibilities to specific providers to meet the program objectives.

To ensure successful provision of such programme, the nurse must determine the number of children unserved and the number of children who have not use services for which they are eligible (Stanhope & Lancaster 2014: 277-285).

Collecting data on the opinions and attitudes of all persons, including trained professional nurses, whether directly or indirectly involved with the program, is necessary to determine if the program is feasible, if there is a need to redefine the problems, or if the a new program should be developed or the existing program expanded or modified.

The United Nations on the agenda for Sustainable Development Goals (2015-2030:6) envisage to promote physical and mental health and well-being, and to extend life expectancy for all, by achieving universal health coverage and accessibility to quality health care. They commit to accelerate progress made in reducing new born and maternal mortality by ending all preventable deaths before 2030.

According to Van Rensburg (2012: 512), the training of prospective health professionals in all categories became expressly geared towards equipping the staff with appropriate primary health knowledge and skills for service rendering in the Primary Health Care (PHC) setting. Health care workers are therefore in a privileged position to ensure successful implementation of the primary health care approach in managing health problems/needs

The effective implementation of the EPI programme together with the integrated strategies of growth monitoring as well as prophylaxis towards reduction of Vitamin A related conditions in children and worm infestation will yield positive results intended by this program.

Mudau (2010:92) alluded to the practice of poor recording that was noted in most of the Road to Health Booklets. This raises the concern if the caregiver was informed about the return dates and the importance of adhering to the EPI and the aims thereof. Mudau (2010:92) stated that the poor recording of dates and immunization doses poses a problem in that it will not be known when the next immunization should be given since the interval was not correctly calculated.

This practice defeats the program objectives of protecting children against vaccine preventable diseases and early detection of growth related health problems such as Tuberculosis and HIV and AIDS.

Wiysonge, Ngcobo, Jeena, Madhi, Schoub, Hawkrige, Shey and Hussey (2012:12) stated that insufficient knowledge of vaccines and EPI practices among staff was one of their findings, and training, support, supervision, regular audit and feedback were the proposed solution. The R48 programme trained professional nurses form part of the implementers of the EPI.

Vaccinators and other health workers, including primarily, trained professional nurses, can be important advocates for the EPI. Therefore, this study sought to explore the perceptions of R48 trained nurses on the implementation of the EPI utilising a descriptive qualitative research approach.

1.2 BACKGROUND

The Extended Programme of Immunization is an initiative geared towards reducing the impact of vaccine preventable diseases and managing other factors that contribute to infant mortality and morbidity. In partnership with UNICEF and WHO, the South African Department of Health enhances achievement of intended outcomes (Matsoso 2014: ii). This ensures that implementers of the EPI have to be knowledgeable about the source of strategies. It, therefore, points back to the educators and mentors if the EPI is correctly interpreted and taught to students according to standard.

When EPI implementers do not record outcomes of clinic visits, it reflects an omission of a management criterion of the reason for the visit. The importance of recording objectives of clinic visit and the outcome thereof should be viewed as crucial to evidence practice.

Hence the study seeks to explore and describe the perceptions of the R48 programme professional nurses with regard to factors contributing to implementation of Extended Programme of Immunization in health problems management.

The researcher as part of the patient care community poses a research question that is determined by gaps in practical knowledge and understanding. Programme related data on storing vaccines, and handling vaccines during and after immunization sessions

should be correctly recorded to assist in investigations. This is in case there should be an adverse event following immunization.

The review of the millennium development goals that were set by the global community revealed an uneven progress and off-track related to maternal, new-born and child health and reproductive health. The country leaders committed themselves to providing focus and scaled up assistance in relevant support programmes. School health services and the primary health care re-engineering are such support programmes that will increase coverage amongst school going age groups and identifying missed opportunities.

The success of the program calls for a health worker who should be trained on appropriate management of the immunization program which includes immunisation safety, management of adverse events following immunizations and the use of essential medicine list in treatment of example anaphylactic shock that may arise during the session.

Training and education focus on learning outcomes of disease surveillance, management of communicable diseases and integrated management of childhood illnesses. These outcomes enable the professional nurse to utilise every immunisation visit to screen all children and caregivers of conditions that may contribute to failure to thrive, for example Tuberculosis (TB) and HIV and AIDS. The implementation of this programme further affords the user to be educated about the benefits of immunizations, Measles and Polio eradication initiatives (Matsoso 2014:122)

Communication with parents, and health workers involved in the programme increase the awareness of the programme objectives and render positive support during campaigns should there be an outbreak of one or other communicable diseases such as Measles. Matsoso (2014: 6) explains that goals are set at National Department of Health but they can only be achieved through implementation of effective program at provincial and district levels. Immunization coverage is one of such goals as set within the Expanded Program on Immunization (EPI). Successful program implementation is dependent on

adequate resources, skills and capacity notwithstanding continuous monitoring, and evaluation to ensure quality service delivery.

1.3 STATEMENT OF THE RESEARCH PROBLEM

The purpose of the Expanded Programme on Immunization in South Africa is to prevent death and reduce suffering from diseases of childhood that can be prevented by immunization of children and women. According to Van Rensburg (2012:248) children in hard to reach districts and rural areas are amongst the most difficult to immunize successfully leading to a low or no immunization coverage in the country. The R48 programme professional nurses are trained in implementation of the EPI that emphasises the implementation of reach every district strategy (RED) (Department of Health SA 2014:126).

During the student accompaniment, it has been discovered that many children at the age of immunization were not fully immunized when they were supposed to. Poor immunization coverage does not only undermine the efforts of the EPI but also reflects negatively on the training of the R48 programme professional nurses and compromises the health of the children. Therefore this study sought to explore perceptions of the R48 programme professional nurses with regard to implementation of EPI that results in under-immunisation of the children in Tshwane District.

1.4 AIM OF THE STUDY

1.4.1 Research purpose

The purpose of the study is to explore the perceptions of the R48 programme professional nurses with regard to implementation of the Expanded Programme of Immunization in Tshwane district Gauteng Province resulting in poor coverage of the children.

1.4.2 Research objectives

In order to meet the purpose of this study the main objectives were to:

- Identify the perceptions of the R48 programme professional nurses with regard to implementation of the Expanded Programme of Immunization in Tshwane district Gauteng Province
- Describe the perceptions of the R48 programme professional nurses with regard to implementation of the Expanded Programme of Immunization in Tshwane district Gauteng Province
- Make recommendations based on the findings of the study

1.5 SIGNIFICANCE OF THE STUDY

The findings will assist the authorities in identifying the R48 programme trained nurses' perceptions with regard to implementation of the expanded programme of immunization. In turn this would assist them in planning how best to implement the EPI and improve immunization coverage. The study would also be used as a baseline for similar studies.

1.5.1 Significance to health care providers

The current study provides health care providers with evidence based patient care and effective record keeping. It is also significant in bringing about improvement in communication with consumers of the EPI strategy in protecting children against diseases that increases suffering in mainly the less than five-year groups

1.5.2 Significance to patients

The study has the potential to help parents, caregivers and children with adequate information about the planned interventions, new and standardized vaccines and regular follow-up and most importantly; reduction of adverse events following immunization and lost to follow-up incidents.

1.5.3 Significance to the policy makers

The knowledge generated from the study is likely to help the programme managers by giving insight into what makes the programme implementers to default on fully adhering to the planned interventions as stated in the policy documents. The study will further improve the immunization coverage thereby strengthening the Expanded Programme on immunization.

1.6 DEFINITIONS OF KEY CONCEPTS

EPI

EPI is the programme that addresses the Expanded Programme on Immunization, vaccine preventable disease surveillance (Acute Flaccid Paralysis, measles, neonatal tetanus) and surveillance of adverse events following immunization (WHO 2015:2). In this study, EPI refers to the immunisation programme that prevents diseases in children.

Perceptions

Perceptions are the processes by which we organize and interpret our sensory impressions in order to give meaning to the environment. Manning, Gale and Krupinski (2015:683). In this study, perception refers to understanding; opinion or belief held by the R48 trained nurses on implementation of EPI.

Infant mortality rate (IMR)

Joubert and Ehrlich (2009:21) define IMR as the number of deaths of children less than 1 year of age during the year divided by the number of live births in that year. It is the age specific mortality indicator used to determine diseases across the lifespan. In this study the researcher refers to this concept to highlight the impact of poor programme implementation with regard to prevention of vaccine preventable diseases.

Primary health care (PHC)

PHC is defined as “essential health care based on practically, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation in the community and at a cost that the community and the country can afford to maintain at every stage of development in a spirit of self-reliance and self-determination” (ANC 1994a:20)

R48 programme

A course that is regulated by the South African Nursing Council (SANC R48 22 January 1982 as amended) referred to as Diploma in clinical Nursing Science, Health assessment, Treatment and Care

1.7 METHODOLOGY

This study used a qualitative design, which Polit and Beck (2012:14) explain as constructivist studies that are heavily focused on understanding the human experience as it is lived, usually through the careful collection and analysis of qualitative materials that are narrative and participative.

Qualitative research allowed the researcher to gain rich understanding of perceptions and experiences of the R48 programme professional nurses post qualification on implementation of the department of health programmes as stipulated by health policies and protocols at primary health care level.

Polit and Beck (2012:487) state that in qualitative research, the design typically evolves over the course of the study. Decisions about how best to obtain data and who to include are made as the study unfolds. Qualitative studies use an emergent design that evolves as researchers make on-going decisions reflecting what has already been learned. An emergent design is a reflection of the researcher's desire to have the enquiry based on the realities and viewpoints of participants- realities that are not known at the outset.

The participant population was both males and females trained on the South African Nursing Council R48 programme of 22 January 1982. Fourteen participants were purposively sampled from the Tshwane district primary health care facilities based on the eligibility criteria of being trained and educated in this programme and employed at these facilities.

The research methods used to gather data from participants were the researcher observation and in-depth interviews. The researcher used a grand tour question, "Could you tell me about your experience with training and education of EPI followed by implementation in the primary health care setting" and allowed the participants to lead the interview. Probe questions were asked to meet the objectives of the study.

The collected data were analysed using interpretive phenomenological data analysis, which is oriented towards themes (Maltby, Williams, McGarry & Day, 2010: 146), followed by report writing. The researcher used the qualitative exploratory design.

1.7.1 Qualitative exploratory design

According to Grove, Gray and Burns (2015:77) a well-designed exploratory-descriptive qualitative study answer the research question: what are the perceptions of the R48 trained professional nurses regarding the implementation of the Expanded Programme of Immunizations in the Tshwane District in Gauteng province? The purpose of the study is achieved, and the researcher has the information they need to address the situation or patient's concern that was the focus of the study. The findings of the study are applied to the practice problem that instigated the inquiry.

The details of this study design will be discussed fully in Chapter 3.

1.8. TRUSTWORTHINESS

According to Polit and Beck (2012: 583) the development of standards for trustworthiness of qualitative research that parallel the standards of reliability and validity in quantitative research emanated from those who adopted the parallel perspective in addressing quality and validity in qualitative research. The parallel perspective maintains that a separate set of evaluative criteria needs to be developed for qualitative inquiry. Self-scrutiny and verification was done by the researcher while reflecting on self-confidence that the data collected are accurate.

Lincoln and Guba 1985 cited in Polit and Beck (2014:584) suggested four criteria of trustworthiness namely: credibility, dependability, transferability and conformability. These four criteria represent parallels to the positivists' criteria of internal validity, reliability, objectivity and external validity

1.8.1 Credibility

Taylor (2014:204) states that credibility refers to the confidence in the “truth” of the data and interpretations provided, and are accomplished by:

- A faithful description of the research process and participants’ experiences
- The use of participant’s own words as quotes to describe their experiences and to give their voice
- Seeking participants’ validation to provide internal checks by taking data for accuracy and interpretations to the source from which data originated.

Brink, van der Walt and van Rensburg (2012:127) outlined the following techniques that are used to achieve credibility:

- Remaining in the field over a long period
- Using a variety of sources in data gathering – triangulation
- Peer debriefing, in which the researcher exposes herself to a disinterested peer who probes the researcher’s biases, explores meanings and clarifies the bases for particular interpretations
- Searching and accounting for disconfirming evidence- negative case analysis
- Having the research participants review, validate and verify the researcher’s interpretations and conclusions-member-checking- which is done to ensure that the facts have not been misconstrued

1.8.2 Transferability

Transferability relates to the degree to which results of the qualitative research are applicable to others in the comparable situations. Transferability is achieved when the researcher provides a thick description of the research setting, location and context, as well as the participants.

Thick descriptions entail collection and provision of sufficient detailed description of data within the given context, and the reportage on them. The reader then makes the judgement about transferability. Purposive sampling maximises the range of specific information obtained from and about the particular context, by purposefully selecting the

participants in terms of knowledge of the phenomenon under investigation and the location.

According to Polit and Beck (2012:585) Transferability refers to the potential for extrapolation, i.e. the extent to which findings can be transferred to or have applicability in other settings or groups. The researcher is able to apply the findings to the wider community within which the sample was chosen

1.8.3 Dependability

Taylor (2014: 204) states that dependability is an outline of audit trail in order to check the routes for decision making at every stage of the research process. An audit trail includes:

- The raw data, the analysis and reduction process, data reconstruction and synthesis process through the notes and other approaches, e. g mind mapping
- Records of decisions made and experiences encountered at each stage of the research process through a reflexive journal
- Records from validation checks, e.g. member checking, which is a process through which participants are asked to ensure that the data transcription is accurate

According to (Polit & Beck 2012:725) dependability is a criterion for evaluating integrity in qualitative studies, referring to the stability (reliability) of data over time and conditions; it answers the question of ‘would findings of an inquiry be repeated if it were replicated with the same participants in the same context?’

1.8.4 Confirmability

According to Taylor (2014:205), Confirmability refers to the degree to which the results of a study may be collaborated or confirmed by others and can be accomplished by:

- Participants’ validation or member checking. This practice reflects the perspective that the research participants are not “participants” who are acted upon instead “expert informants” who can help the researcher to better understand the phenomenon under investigation (Creswell 2007:25)
- The provision of a balanced approach to the reporting of results/findings

- A clear audit trail to help establish that the results and interpretations are clearly derived from the data.
- Evidence of reflexivity in the research process

Polit and Beck (2012:585) refers to conformability as objectivity, i.e. the potential for congruence between two or more independent people about the data's accuracy, relevance, or meaning the data that participants provided and that the interpretation of those data are not invented by the inquirer.

1.9 ETHICAL CONSIDERATIONS

Ethical considerations include the importance of respecting participants, responding to the needs of vulnerable individuals and groups, gaining consent and maintaining confidentiality. A common way of assuring confidentiality of responses is to anonymise both individuals and organizations. The current study was therefore confined to the principles of autonomy, justice, benevolence and non-maleficence. Autonomy is the respect and protection of participants. The justice principle requires that research participants be treated with fairness within the context of research, which means the needs of the participants come before the objectives of the study. Benevolence and non-maleficence is a research practice that maximise benefits and minimises harm. Maltby et al (2010:349).

1.9.1 Beneficence

According to Botma et al (2015:20), the principle of beneficence is grounded in the premises that a person has the right to be protected from harm and discomfort; one should do good and above all no harm. Participants had a right to decide voluntarily whether to participate in the study and even withdraw at any stage without untoward outcomes. The study involved professional nurses working at primary health care facilities therefore permission was given by district research unit and facility managers... The participants were given information about the study after which, if they fully understand the participation gave a written consent.

1.9.2. Respect for human dignity

Participants were treated as autonomous agents capable of controlling their own activities. They were informed of their rights, including one to decide voluntarily about participating, and were allowed to ask questions (Polit & Beck 2010:123). The researcher explained the study to the participants so that they can make informed choice to participate, and their decision was respected whether to participate or not without compensation and/or intimidation.

1.9.3 Justice

The principle of justice means that participants should be treated fairly. Thus the researcher should adhere to the research protocol and information given in the information leaflet (refer attached Annexure on information leaflet).no new interventions, procedures or techniques that have not been described in the information brochure should be executed. The time estimated for the interview should be adhered to as mentioned in the protocol and information explained should there be a need to do follow-up. (Botma, Greeff, Mulaudzi & Wright 2015: 21).

1.9.4 Privacy

According to de Vos et al (2012:119) privacy implies the element of personal privacy, while confidentiality indicates the handling of information in a confidential manner. This principle was applied in this study by assuring participants of anonymity and only identifying them as participant 1 following numbers up to 8. The purpose of the voice recorder used was discussed and it will be kept safely as evidence.

1.9.5 Self-Determination

The right to self-determination is based on the ethical principle of respect for persons, and it indicates that humans are capable of controlling their own destiny. People should be treated as autonomous agents who have the freedom to conduct their lives as they choose, without external controls. The researcher treated participants as autonomous agents in the study by: informing them about the study, allowing them to choose whether or not to participate, and allowing them to withdraw from the study at any time without penalty (Grove, Gray & Burns 2015:101)

1.10 STRUCTURE OF THE DESSERTATION

Chapter 1 Discusses the background of the problem statement in which study aim and objectives are outlined and key terms were defined

Chapter 2 This chapter discusses literature review that will be a theoretical presentation including internet search, guidelines and strategic plans of the Department of Health focused on Maternal and Child health care as well as research information from sources on methodology

Chapter 3 Discusses research methodologies, including research design, sampling, methods used in data collection, analysis of data and validity of the study

Chapter 4 Presents data analysis and description of the research findings

Chapter 5 Conclusions, implications, recommendations and limitations of the study

1.11 CONCLUSION

Quality skills and improved communication in the EPI strategy affords the individual, family and community a greater chance of protection against vaccine preventable diseases and their complications.

Modern vaccines provide high levels of protection of several diseases such as pneumococcal and rotavirus diseases, and protection against consequent disability and death

Training of primary health care ensures the policy makers and the community of a sustainable implementation of the programme and fosters a culture of making every immunization visit an opportunity that every child will benefit from.

The recent strengthening of school health services, primary health care reengineering as well as ward base outreach approach provide a strong linkage and integration of approaches to reach the hard to reach individuals and also improves on immunization coverage. The trained R48 professional nurse provides the strong base for referral and ultimate management and recoding of identified missed opportunities.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter covers literature review. The researcher undertook the literature review to align oneself with correct process to follow and view what other researchers have already done on the perceptions of professional nurses and to establish immunization programme gaps.

The Vaccinator's Manual SA (2014) is prepared as a guide for health workers on EPI implementation. It outlines the integrated health strategies of catch-up schedule to update missed opportunities and disease surveillance for those children who present with suspected communicable diseases especially with regard to vaccine-preventable diseases such as Measles.

Setswe, Naude' and Zungu (2011: 254) explain the immunization programme together with the integrated programmes geared for a healthy child who should be continually screened for conditions such as faltering weight or delayed milestones. They emphasise equity in the distribution of health resources, particularly between developed and developing countries. This concurs with The Global Immunization News 2011 (search: 15/06/2016) that outlines the objective of the Global Alliance Vision on Immunizations to strive to strengthen vaccine availability to all member countries to protect beneficiaries of this programme globally.

Wiysonge, Ngcobo, Jeena, Madhi, Schoub, Hawkrige, Shey and Hussey (2012:578) conducted a survey on programme managers' views on childhood immunization which yielded results of insufficient knowledge about vaccines and immunization amongst health workers. In the view of the researcher this indicates a need for close monitoring and evaluation coupled by strengthening education and training and social mobilization of immunization strategies. Mothiba and Tladi (2016:923) concur with Wiysonge et al (2012:578) that anti-immunizations rumours and reluctance from parents to bring children for vaccines as scheduled was commonly experienced. These missed opportunities were also revealed by a study conducted by Jonker and Stellenberg

(2015:1), who established that not all mothers received information about the Road to Health booklet or card. According to views expressed by mothers, integrated child health services were not practiced. The consequences were missed opportunities in immunizations, lack of provision of vitamin A, and absence of growth monitoring, feeding assessment and provision of nutritional advice. In other countries researchers found positive outcomes of the EPI programme implementation as described by Cisse', Breugelmas, Ba', Diop, Faye, Mhlanga, Mueller, Koffi and Gessner (2010:499) in Senegal where the conclusion of their study depicts successful implementation of Hib conjugate vaccine into the routine immunization programme. The result was near elimination of Hib meningitis burden.

The R48 Programme leads to a Diploma in Clinical Nursing Science, Health Assessment, Treatment and Care. The exit level outcome for the graduate is to demonstrate the ability to function as a consultant when performing a comprehensive assessment of clients of all age groups in a primary health care setting. This also includes integrated management of childhood illnesses (Curriculum 2002:14). R48 is the regulation that controls and sets standards that should be met for a nurse to be awarded the diploma and further accredit the primary health care clinical facilities that shall afford the nurses an opportunity for experiential learning in line with the South African Nursing Council as the quality assurance body in nurse education institutions. It is therefore imperative that nurses who graduate from this programme should be knowledgeable about integrated strategies that are geared towards preventive, promotive, curative and rehabilitative care.

According to Stanhope and Lancaster (2012:549), a programme is an organised approach to meet assessed needs of individuals, families, groups, populations or communities by reducing the effect of or eliminating one or more health problems. Specific examples in population-focused nursing are home health, immunizations and infectious diseases programs, health-risk screening for industrial workers and family planning programs. The expanded program on immunizations is also geared towards minimizing the impact of the under-five population of vaccine preventable diseases, screening for life threatening diseases that will be diagnoses through the growth monitoring approach e.g. Tuberculosis, HIV infections and Cancer (Matsoso 2014:5).

The integrated approach emanates from the Alma Ata Declaration (1978) in which the global community adopted its focus on putting people first. Primary health care was seen as the key to attain the goal of health for all as part of development in the spirit of social justice. However, Dookie and Singh (2012:1) argue that although the primary health care approach provides a strong framework for this delivery, it is not widely applied. They further state that major challenges facing primary health care include inadequate political, financial, human and material commitments, optimal use of available resources, changing management techniques such as decentralization; and ensuring effective community participation and intersectoral collaboration.

The R48 qualified nurses form the bases of implementation, monitoring and evaluation of the Expanded Programme on Immunization together with the integrated approaches of growth monitoring and administration of Vitamin A and deworming prophylaxis. The researcher therefore thought it to be beneficial to search for factors that may be contributing to the missed immunization opportunities.

2.2 PERCEPTIONS OF THE PRIMARY HEALTH CARE TRAINED NURSES

Perception: according to *Business Dictionary Internet Explorer* (2017:12.06) Perception is the process by which people translate sensory impressions into coherent and unified view of the world around them. Though necessarily based on incomplete and unverified information, perception is equated with reality for most practical purpose and guides human behaviour in general.

According to Xaba et al (2012:535) participants universally perceived that despite the training for expanded programmes having been conducted in the region, there is still a shortage of skills and experienced professionals which leaves the newly qualified without proper support.

Participants in the study conducted by Van Der Linde and Kritzinger (2013:553) affirmed the impact of training primary health care professionals, which shall empower them in

identifying early developmental health problems in order to reduce the burden of disabilities like communication disorder in infants. Implementation of EPI affords the professional nurses to conduct a full developmental screening, thus avoiding missed opportunities in early stages of life.

2.3 HEALTH CARE DELIVERY SYSTEM IN SOUTH AFRICA

According to Moorman, de Jager, Volmink and Naidoo (2014:20) primary health care was formally introduced in South Africa with the implementation of two policies in April 1994. The Reconstruction and Development Programme (RDP) (1994:53, Section 2.12) grouped together five major policy programmes that are linked to one another, namely: meeting basic needs; developing our human resources; building the economy and democratising the state and society. The RDP (1994:43) intended to bring together the public and private health to be organised at national, provincial, district and community levels. It intended to move away from curative inaccessible health care to preventative comprehensive health care and to make provision for free healthcare for pregnant mothers and children under the age of six and universal access to primary healthcare for all South Africans.

There is a special emphasis on the development of clinics and basic healthcare programmes, such as safe motherhood, expanded immunization, management of communicable diseases and the treatment of chronic ailments (Department of health, 2000:). According to van Rensburg (2012:2), National Health Care System is the health sector of a society or country that encompasses “the totality of policies, programs, institutions and actors that provide health care-organized efforts to prevent diseases.”

The adoption of the Alma Ata Declaration in 1978 that emphasised Primary health care approach emphasised intersectoral collaboration, community involvement and people’s empowerment in health matters. The expanded programme on immunization is thus one of the strategies that are geared towards this comprehensive approach in managing vaccine preventable diseases.

According to the Gauteng Department of Health (2014:24) provision of high-quality care is important as highlighted in the following strategic plan vision:

- Decrease neonatal mortality from 15/1000 to <10/1000 by 2019/20
- Decrease child (under 5 years) diarrhoea cases fatality rate from 3.5 % to < 2% by 2019/20
- Decrease child (under 5 years) severe acute malnutrition case fatality rate from 6.1% to 5% by 2019/20
- Sustain immunization coverage at 95% currently at 109% for children under 1 year.
- Decrease DTaP-IPV, Measles 1st dose drop-out rate from 3.5% to < 2% and increase Measles 2nd dose coverage from 85% to 95% by 2019/20
- Reduce infant mortality from 34 per 1000 to 20 per 1000 live births by 2019/20

The successful implementation of the vision should be addressed by all levels of care that make up the health care system of the country. The health care system is divided into three levels namely: the National, Provincial and District levels.

2.3.1 The National Level

Setswe, Naude and Zungu (2011:9) state that the National Health level has responsibilities for monitoring and evaluating service delivery in health facilities. EPI is amongst the services to be delivered by the health professionals. According to Xaba, Peu and Phiri (2012:12) nurses perceive poor service delivery as attributed to inadequate skills from the training institution.

The National Development Plan 2030 has as its Medium Term Strategic Framework [MTSF] 2014-2019 priorities of improving human resource and strengthening accountability. It is therefore of utmost importance to ensure that the training and education of the health professionals is aligned to this vision.

Kautzky and Tollman (2008:17) have noted that there are critical shortages of trained health personnel, and the inability to fill essential posts, which is a key barrier to achieving

the implementation and provision of district-based health services in South Africa today. They further argue that the health systems development and primary health care services are undermined at the most critical point of care, as most of the professionals are moving into the private sector that caters for only 20% of the population.

According to Mhlanga (2013:25), South Africa has focused on Primary Health care policies and strategies that promote the health of women and children highlighting amongst others improved immunization through high coverage under the EPI, the resultant decrease in measles and tetanus, and South Africa being declared polio free.

2.3.2 The Provincial level

The Provincial health level monitors and evaluates the EPI services at district level. It is also responsible for planning and providing the training of health professionals for the whole province in preparation for implementation of department of health programmes.

According to van Rensburg (2012:133), provincial departments of health are broadly responsible for promoting and monitoring the health of the people in the provinces as well as developing and supporting a caring and effective EPI. The provincial departments established the province-wide District Health System (DHS) based on the primary health care principles to ensure implementation of the national Health Policies, plans, norms and standards.

Work ethics, work morale and productivity along with many constraints and deficiencies accompanying these, are all components of human resources, prominent phenomena in the workplace and often cause concern (DOH 2011a:3). The Policy (DOH 2011a:3) acknowledges that a number of challenges continue to hamper effective and efficient delivery of quality health care including lack of appropriate legislation and policies and those that relate to the constraints.

2.3.3 The District level

At this level, the focus is on primary healthcare. The district healthcare level is the vehicle of primary health care delivery. Service that take place at District level will be overseen by the District management team and these include EPI given at community health centres and clinics. Clinics will have outreach programmes for the children. The primary health care re-engineering has as its objective a three-streamed approach of community ward-based primary health care teams: strengthening school health services and primary health care facilities.

The rationale for introduction of the district-based primary health care system in South Africa rested on providing a simple, integrated and logical service, to overcome inefficiencies in service delivery caused by undue fragmentation of the system

According to van Rensburg (2012:150) a well-functioning health district is one in which the health services are geared up to meet the primary health care needs of the population. Follow-up and review at regional and sub-regional levels provide useful opportunities for peer learning, including voluntary reviews, and sharing of best practices and discussion of shared targets.

2.4 SERVICES TO CHILDREN

2.4.1 Expanded Programme on Immunization (EPI)

Passive immunity refers to immunization through the transfer of a specific antibody from an immunized individual to a non-immunized individual, such as the transfer of antibody from a mother to an infant.

The Immunization goal is to protect individuals by using immunizing agents to simulate antibody formation. Vaccinating children is an example of active immunization. South Africa adopted the immunization schedule, which was developed by the global community to protect the under-five population, which has recently included the ages of six, nine and

twelve years. to protect them against tetanus and diphtheria (Td). Introduction and addition to the schedule of the Human Papilloma Virus (HPV) vaccine was done to protect the nine year old who is not sexually active against early cervical cancer. The professional nurses must ensure that this schedule is implemented accurately and to educate the caregiver about the reasons for bringing the child to the clinic for the subsequent vaccination until fully immunized.

The R48 primary health care trained nurses are taught about immune system and the use of immunisation as a means to reduce the impact of vaccine preventable diseases and building individuals' immunity to such diseases. This is also emphasised by the study conducted on exposing the student to the history of the Expanded Programme on Immunisation in South Africa (Barker 2010:65). The R48 primary health care trained nurses should be able to implement the programmes as laid down by authorities in order to employ structured monitoring and evaluation of their professional acts.

Dlamini and Maja (2016: 676) explain that South Africa has a functional National Advisory Group on Immunization (NAGI), which is an effective source of information and advisory body to the National Department of Health (NDoH 2014:12). This is evidenced by its major role in the introduction of Pneumococcal Vaccine (PCV) and Rotarix vaccine (RV).

EPI is an integrated approach that affords the child an opportunity to be screened for those conditions that may present failure to grow or poor weight gain. These conditions include malnutrition, tuberculosis and HIV infection as indicated in the IMCI strategy (2014). The R48 programme empowers the professional nurse with skills of assessment and diagnosis of such illnesses. It also affords the caregiver education about the importance of immunization, follow-up care and childhood illnesses IMCI principles (2014). The unborn child will also be protected through the prevention of mother to child transmission strategy implemented during the first visit when the woman reports for pregnancy. The EPI has within it the immunization of the pregnant woman against tetanus to protect the new born against neonatal tetanus. SAMJ (2016:676).

Prevention of mother to child transmission (PMTCT) is another strategy that has been adopted by the Government of South Africa, as outlined in the guidelines for maternity care in South Africa (2015:135) to reduce infant mortality caused by HIV infections during pregnancy. The R48 primary health care trained nurses should be vigilant during the

immunization visit, when doing growth monitoring and developmental screening to identify children who present symptoms of failure to grow or poor weight gain and screen them for HIV infections. Pregnant mothers who fail to report to the clinic in the first trimester may miss the opportunity of HIV screening which should be done as soon as they present to the clinic even when they are in labour. This is the other strategy to reduce infant mortality rate.

2.4.2 School health services

Integrating immunization and other linked health interventions in the health systems context is an approach that ensures good practices to service delivery to children and adolescents. South Africa has developed the: Integrated school health Policy (ISP: 2012:39) in conjunction with the Department of Health to focus on both the immediate health problems of learners and interventions that can promote their health and wellbeing during childhood and adulthood. The policy guides the school health nurse on methods of screening for poor hearing, vision and under nourishment. There is implementation of health education programmes that address communicable diseases, substance abuse as well as immunization for prevention of cervical cancer in young non-sexually active female learners.

The integrated school health policy provides an orientation to school health by guiding South African school-aged children to understand the needs of all beneficiaries who require school health services and describing the school health services in relation to international models of school health. The integrated school health policy describes the school health package in conjunction with the EPI services. The objectives of the policy are aimed at screening of those ailments that may hinder learning progress. The referral system is put in place to refer children with identified ailments such as poor vision or hearing defect that may hinder learning.

2.4.3 Integrated management of childhood illnesses

The integrated management of childhood illnesses strategy (IMCI) is an integrated approach that was introduced by the World Health Organization (WHO). The R48 primary health care trained nurses who see sick and well children at primary health care facilities. (DOH, WHO & UNICEF: 2014:147).

IMCI aims at addressing the major symptoms utilizing the principles of look listen and feel to assess, classify, identify treatment and treat the child for both the well and ill child presenting at the clinic. Implement the referral system of the severe classification to reduce the possible complications related to the severe diseases. The incorporated household community component is based on child-to –child and child-to family approach with the idea that the learners will share child health knowledge and practices with other family and household members (ISP 2012:56).

The strategy is therefore intended to enhance the achievement set by the Gauteng Department of Health as outlined in SP 2015/16-2019/20. The professional nurses trained under the R48 programme form the inherent skilled health care providers of the integrated approaches.

2.5 Conclusion

Although challenges remain, South Africa continues to monitor the immunization coverage and introduces new vaccines in line with results emanating from disease surveillance; EPI-SA (2014:115). According to the Vaccinator Manual (2014: 116) integrated disease surveillance refers to integrating all surveillance activities common to all programmes e.g. data collection, processing and dissemination, training supervision and evaluation of surveillance programme.

Training of primary health care ensures the policy makers and the community of a sustainable implementation of the programme and fosters a culture of making every immunization visit an opportunity that every child will benefit from.

The recent strengthening of school health services, primary health care reengineering as well as ward base outreach approach provide a strong linkage and integration of approaches to reach the hard to reach individuals and also improves on immunization coverage.

The trained R48 professional nurse provides the strong base for referral and ultimate management and recoding of identified missed opportunities. Their competencies in managing the young infant (birth to 2months) and the child, aged 2months to 5years utilizing the IMCI principles of look, listen and feel shall ensure best outcomes. The targeted diarrheal case fatality, severe acute malnutrition and best practises in helping baby's breath, are the critical areas that IMCI in cooperates. Immunization coverage includes all missed opportunities with catch-up programs evaluated in the reviewed Vaccinator's Manual (2014:111)

Monitoring and evaluation of impact of the developed strategies, policies and programmes is pivotal to primary health care service delivery. Professional nurses are at the helm of these initiatives.

CHAPTER 3

METHODOLOGY

3.1 INTRODUCTION

This chapter discusses the research approach; design and methodological framework used to explore the perceptions of the R48 trained professional nurses with regard to implementation of EPI in Tshwane District, Gauteng Province. It also explains in detail the sampling method, data collection and data analysis.

3.2 RESEARCH METHODOLOGY

According to Brink et al (2012:121) the qualitative approach is a broad aspect of methodology used to study phenomena of social action and of which researchers do not have any full understanding. Grove, Gray and Burns (2015:20) define qualitative research as a systematic, participative approach used to describe life experiences and situations and give them meaning. This approach evolved from the behavioural and social sciences as a method of understanding the unique, dynamic, holistic nature of humans. Qualitative research is conducted to promote an understanding of human experiences and situation and develop theories that describe these experiences and situations.

For this study, the exploratory, descriptive design was used, to determine the perceptions of the R48 trained professional nurses regarding implementation of EPI in Tshwane District Gauteng Province

3.3 RESEARCH DESIGN

The design is usually determined by the type of research, the problem investigated, and the research questions posed. This study followed the descriptive design in order to provide more information about the characteristic immunization field within the primary health care setting. According to Grove et al (2015:212) a descriptive design may be used to develop theories, identify problems with current practices, make judgements about

practices, or identify trends of illness, illness prevention and health promotion in selected groups. This study followed an explorative and descriptive design, as the researcher was focused on exploring and describing the perceptions of R48 trained professional nurses with regard to implementation of the EPI programme in Tshwane District, Gauteng Province of South Africa.

3.3.1 Qualitative research

Qualitative research is a systematic approach used to describe experiences and situations from the perspective of the person in the situation. The researcher analyses the words of the participant, finds meaning in the words, and provides a description of the experiences that promote deeper understanding of the experiences (Grove, Gray & Burns 2015:67). The researcher used the qualitative approach to explore and describe the perceptions of R48 trained professional nurses on implementation of the expanded programme on immunization in Tshwane District Gauteng Province. It focused on the qualitative aspect of the meaning, experiences and understanding of the participants. The qualitative approach further assisted the researcher to explore the meaning, and describe practices of professional nurses in their own context.

3.3.2 Qualitative exploratory research

Polit and Beck (2012: 545) define qualitative research as a systematic, participative methodological approach used to describe life experiences and give them meaning.

The qualitative exploratory research design was used; to explore and describe the perceptions of the R48 trained professional nurses regarding implementation of EPI. The nature and context of their experiences were understood with regard to immunization and integrated approaches of growth monitoring, developmental screening, deworming and administration of vitamin A.

3.3.3 Qualitative descriptive research

According to Grove, Burns and Gray (2015: 212) descriptive studies are designed to gain more information about the characteristics in a particular field of study. The purpose of the descriptive study was to identify problems of the current practice, make judgements about practice, and identify illness prevention and health promotion in the selected group.

The researcher gave the participants an opportunity to describe their experiences and attach meaning to the implantation of EPI in the selected primary health care facilities in Tshwane district of Gauteng Province.

3.4 RESEARCH METHOD

3.4.1 Population

Polit and Beck (2012:738) define population as the entire set of individuals or objects having some common characteristics. A population is the entire aggregation of cases in which the researcher is interested. For instance, in this study the researcher was interested in professional nurses that are trained in Diploma in Clinical Nursing Science, Health assessment, Treatment and Care (R48). The accessible population that was intended for the study was those professional nurses who implement Expanded Programme on Immunization in Tshwane District.

Access to the population was negotiated with the area managers and facility managers because the clinics were used as the venues for conducting individual interviews.

3.4.2 Sample

According to Creswell (2011:110), a sample is the small part of the population selected for study. The researcher used the non-probability sampling method. Purposive sampling technique was utilised to select 15 R48 primary health care trained nurses aged 28-60 years. This means that the researcher selected participants based on their knowledge and professional qualification.

3.4.3 Sampling

According to Brink et al (2012: 132) sampling is defined as the researcher's process of selecting the sample from a population in order to obtain information regarding phenomena in a way that represents the population of interest.

The researcher used purposive sampling to collect data from the R48 primary health care trained nurses who could provide the essential information required to answer the research question. The sample included R48 primary health care trained nurses readily available during the time of data collection. The sample size of 15 was determined by the saturation reached during the in-depth interview

Inclusion criteria

To qualify for inclusion, R48 primary health care trained nurses aged 28 to 60 years were sampled. They were supposed to have experience implementing EPI services and the child survival programmes in the Tshwane District of Gauteng Province. Inclusion sampling criteria are the characteristics that the participant or element must possess to be part of the target population, (Grove et al 2015:251)

Exclusion criteria

According to Boswell (2014:183) exclusion criteria as those characteristics that would make a person ineligible to be in the sample. In this study all the primary health care professional nurses who were not R48 trained in the Tshwane District of Gauteng Province were excluded.

3.5 DATA COLLECTION

Data collection is the precise and systematic gathering of information relevant to research purpose or specific objectives, or hypothesis of the study (Burns & Grove 2011: 52; Brink et al 2012: 132).

A grand tour question was used to collect data, where a broad question was asked in an unstructured interview to gain a general overview of the phenomenon, on the basis of which more focused questions were subsequently asked (Polit & Beck 2012:729).

The researcher asked questions and probed according to the response of the participants and in line with the study objectives. Data were collected by using a voice recorder. The researcher asked the participants permission to use the voice recorder. The researcher interviewed the participants until data saturation was reached.

3.6 DATA MANAGEMENT AND ANALYSIS

According to De Vos et al (2011:408) the first step in data analysis is away from the site. This is often referred to as intensive data analysis phase. If data have been recorded using a technical media, transcription is a necessary step on the way to interpretation.

Flick (2009:89) in De Vos et al (2011:408) suggests that it seems more reasonable to transcribe only as much as is required by the research question. Gerrish and Lacey (2010:23) notes that data analysis is the most crucial phase of any research project. Once data is collected, they need to be assembled and organised in such a way that conclusions can be drawn from them. This study used the Tesch's eight steps of data analysis and coding. Themes and subthemes emerged from the data collected from the perceptions of the R48 trained professional nurses regarding implementation of EPI. Grove et al (2015:89) define coding as the process of reading data, breaking text down in subparts, and giving label to the part of the text. These labels provide a way for the researcher to begin to identify patterns in the data, because sections that were coded in the same way can be compared for similarities and differences.

3.6.1 Data management

Data management in qualitative research involves converting masses of data into smaller, manageable segments (Polit & Beck 2012:562). Because of the volume of data captured, it is important that the researcher focuses on reducing it so that it can effectively be examined.

Burns and Grove (2011:535) describe data analysis as a technique used to reduce, organise and give meaning to information. Data analysis involves making sense of text and image data (Botma, Greeff, Mulaudzi & Wright 2010:220).

Data management was done according to Creswell's (2014:98) eight steps to managing Qualitative Databases

Data analysis was done by listening to voice recorder/audiotape and checking on field notes taken during data collection. Data analysis will be done concurrently with data collection. Tech's eight steps of analysis as stated by Creswell (2014:100) was followed.

Step 1: Reading through the data

In this step, the researcher will read and re-read each transcript in order to obtain a general sense about the whole content. The researcher will put aside any preconceived ideas about the phenomena under the study, to prevent contamination of the findings.

Step 2: Reduction of the collected data

In this step, the researcher will extract the significant statements that pertain to the phenomenon under the study from each transcript. The researcher will record these statements on a separate sheet noting their pages and lines numbers.

Step 3: Asking questions about the meaning of the data collected

The researcher will formulate meanings from these significant statements. Each underlying meaning will be coded in one category as they reflect an exhaustive description. Then the researcher will compare the formulated meanings with the original meanings maintaining the consistency of description.

Step 4: Abbreviation of topics to codes

The researcher will group all formulated meanings into categories that reflect a unique structure of clusters of themes. Each cluster of theme will be coded to include all formulated meanings related to that group of meanings. Thereafter, groups of clusters of themes that reflect a particular vision issue will be incorporated together to form a distinctive construct of theme.

Step 5: Development of themes and sub-themes

The findings of the study will be integrated into an exhaustive description of the phenomenon. All emergent themes will be defined into an exhaustive description. After merging all the study themes, the whole structure of the phenomenon “perceptions of R48 trained professional nurses on implementation of EPI” will have been extracted.

Step 6: Compare the codes, topics and themes for duplication

The fundamental structure of the phenomenon should be described. The researcher will check in the findings for the redundant, misused or overestimation descriptions and eliminate them from the overall structure.

Step 7: Initial grouping of all themes and sub-themes

The data belonging to each theme will be assembled in one column and preliminary analysis performed, followed by meeting with the researcher and coder to reach consensus on themes and sub-themes and that each one has come up independently.

Step 8: Recoding if necessary

Recoding will be done if consensus is reached on data that were missed or misinterpreted by either the researcher or the coder.

3.6.2 Data analysis

Eight steps of Tech's inductive, descriptive open coding technique Creswell (2014) was used by following the steps below:

Step 1: Reading through the data

The researcher got a sense of the whole by reading all the verbatim transcripts carefully. This gave ideas about the meaning of data segments. The meaning emerged during reading were written down and all ideas as they come to mind. The researcher carefully and repeatedly read the transcripts of all the participants and understood them.

An uninterrupted period of time to digest and thought about the data in totality was created. The researcher engaged in data analysis and wrote notes and impressions as they come to mind.

Step 2: Reduction of the collected data

The researcher scaled down the data collected to codes based on the existence or frequency of concepts used in the verbatim transcripts. The researcher then listed all topics that emerged during scaling down. The researcher grouped similar topics together, and those that did not have association were clustered separately. Notes were written on margins and the researcher started recording thoughts about the data on the margins of the paper where the verbatim transcripts appear.

Step 3: Asking questions about the meaning of the collected data

The researcher read the transcripts again and analysed them. This time the researcher asked herself about the transcriptions of the interview based on the codes (mental

pictures codes when read through) which existed from the frequency of the concepts. The questions were “Which words describe it?” “What is this about?” and “What is the underlying meaning?”

Step 4: Abbreviation of topics to codes

The researcher started to abbreviate the topics that have emerged as codes. These codes needed to be written next to the appropriate segments of the transcription. Differentiation of the codes by including all meaningful instances of specific code's data were done. All these codes were written on the margins of the paper against the data they represent with a different pen colour as to the one in step 3.

Step 5: Development of themes and sub-themes

The researcher developed themes and sub-themes from coded data and the associated texts and reduced the total list by grouping topics that relate to one another to create meaning of the themes and sub-themes

Step 6: Compare the codes, topics and themes for duplication.

The researcher in this step reworked from the beginning to check for duplication and to refine codes, topics and themes where necessary. Using the list of all codes, she checked for duplication. The researcher grouped similar codes and recoded others where necessary so that they fit in the description.

Step 7: Initial grouping of all themes and sub themes

The data belonging to each theme were assembled in one column and preliminary analysis was performed, which was followed by the meeting between the researcher and the coder to reach consensus on themes and sub-themes that each one has come up with independently

Step 8: Recoding if necessary

A necessity to recode emerged as some of the themes reached independently were emerged

3.7 TRUSTWORTHINESS

Measures taken to ensure trustworthiness of the data collected followed Lincoln and Guba's framework of quality criteria namely Credibility, Dependability, Confirmability and Transferability as already discussed (De Vos et al 2012:419)

3.7.1 Credibility

Credibility is referred to as the alternative to internal validity, in which the goal is to demonstrate that the inquiry was conducted in such a manner as to ensure that the participant has been accurately identified and described. Prolonged engagement with the participant was done together with follow-up questions to validate the data collected. Only the participants that satisfied the inclusion criteria were interviewed.

3.7.2 Transferability

De Vos et al (2012: 420) refer to Lincoln who proposes that transferability as the alternative to external validity or generalizability. It refer to the extent to which findings can be transferred to or have applicability in other settings or groups. Thick description of the research setting, study participants and the interview were recorded using audio tape and field notes.

3.7.3 Dependability

This is the alternative to reliability, in which the researcher attempts to account for changing conditions in the phenomenon chosen for the study as well as the changes in the design created by increasingly refined understanding of the setting.

3.7.4 Confirmability

Polit and Beck (2012:585) explain Confirmability as objectivity, that is, the potential for congruence between two or more independent people about the data's accuracy, relevance or meaning. The participant's information has been referred to and quoted verbatim during data analysis from which themes and sub-themes arose.

3.8 ETHICAL CONSIDERATION

According to De Vos et al (2012:114) ethics implies preferences that influence behaviour in human relations, conforming to a code of principles, the rules of conduct, the responsibility of the researcher and the standards of conduct of a given profession. Ethical considerations are necessary to uphold the rights of the participants against harmful practices. Besides the participants, ethics in research is aimed at protecting the right of the institution where the research was taking place. The research integrity is central to ethical considerations. These aspects of ethical considerations are discussed below with respect to how they were applied in the current study.

Firstly, the researcher visited the institutions informing the clinic authorities about the study and accessing the clients. Secondly, for informed consent, the researcher explained the purpose of the study to participants, their expectations, their voluntarism, confidentiality, benefits and risks and my name and contacts.

3.8.1 Respect for Autonomy

To respect the participants' autonomy the researcher considered the participants' opinions and choices while refraining from withholding information necessary to make a considered judgment. There were no names or defining character required from the participants on audiotapes or field notes. Names of the participants were not linked to the data collected during the interview and field notes (McCormic 2013:253).

3.8.2 Beneficence

The researcher took into consideration the principle of beneficence by assuring that there were no direct benefits associated with participating in the study, however knowledge obtained helped add on information already available regarding the perceptions of R48 trained professional nurses on implementation of EPI. Hence, the study benefits the participants by allowing them to reflect back at their experiences without any harm to their wellbeing (McCormic 2013: 253). The researcher respected the decisions made by the participants and protected them from any physical or emotional harm.

3.8.3 No maleficence

The study did not anticipate any discomfort to the participants as it did not entail any manipulations of experimentations to the participants. The study confined to the concept of discussion in order to avoid psychological effects that may arise from the practical experiences of the participants. However, in some instances where the participant misunderstood the question or needed clarification, the researcher rephrased the question related to the phenomenon under study (McCormic 2013: 255)

3.8.4 Justice

The study applied the purposive sampling technique, selecting participants regarded as having information for the study. The research participants' selection was based on the research requirements and not on the vulnerability or compromised situation of specific people (McCormic 2013: 259). The researcher afforded the participants equal benefits of justice in the study by providing confidentiality according to individual needs; giving equal share in responding to questions; respecting individual cultural and societal contributions to the interview.

3.8.5 Ethical clearance

The researcher obtained Ethical Clearance from UNISA Ethics Committee: Department of Health Studies

3.8.6 Permission to conduct research

Permission to undertake the research was obtained from Tshwane Research Committee, and Facility managers of the relevant primary health care facilities.

3.8.7 Informed consent

Informed written consent was obtained from the participants after all possible information about the purpose of the study was explained. The participants were given the background of the study in order to decide voluntarily whether to agree or disagree to participation. Emphasis was placed on accurate and complete information. Participants will fully comprehend the details of the investigation and consequently be able to make voluntary, thoroughly reasoned decision about their possible participation de Vos, Strydom and Delport (2012:117) the researcher explained voice recording and note taking during the interview and participants signed voluntarily consent that was verbally confirmed in the audio recordings of the interview.

3.8.8 Voluntary participation

Participants were informed that they were allowed to withdraw from participating at any time if they felt they could not continue without fear of being victimised. Grove, Gray and Burns (2015:113) noted that the researcher obtains consent after prospective participants receive the essential information about the study and have demonstrated comprehension of this information. De Vos et al (2012:116) emphasise that participation at all times should be voluntary and no one should be forced to participate in a project. The study participants were afforded this right throughout the current study.

3.8.9 Scientific integrity of research

The study has the approval from the University of South Africa. The researcher also complied and submitted ethics application to the Research and Ethics Committee of the Ministry of Health. Permission was granted by all primary health care facilities that were selected for the study. The researcher has conformed to methodological requirements of the qualitative study. All data captured was stored and captured in a voice recorder and field notes kept safely under lock and key.

3.9 CONCLUSION

Qualitative research was used to develop a rich understanding of a phenomenon as it exists in the real world and as it is constructed by individuals in their context. That is, understanding of perceptions of R48 trained professional nurses in the implementation of the EPI in primary health care setting. The study population of 15 R48 programme trained professional nurses was purposively selected based on the inclusion criteria of being R48 trained professionals above the age of 18years, both genders and both employed by the Department of health and City of Tshwane Municipality.

Data were collected using a grand tour question during in-depth interviews using audiotape and field notes. Follow-up questions were asked until data saturation was reached. Participants' rights were observed throughout the interview by considering all ethical issues of the study.

CHAPTER 4

ANALYSIS, PRESENTATION AND DESCRIPTION OF THE RESEARCH FINDINGS

4.1 INTRODUCTION

Chapter 3 described research methodology including research design, sampling method used in data collection, analysis of data and validity of the study. Chapter 4 presents qualitative data analysis and description of the research findings using Tesch's open coding technique on the perceptions of R48 trained professional nurses with regard to implementation of EPI in the Tshwane District of Gauteng Province.

4.2 BIOGRAPHIC DATA OF PARTICIPANTS

The aim of giving demographic profiles of participants is to provide a concise description of participant's characteristics that may have possible influence in the study. The information was collected by asking the individual participant about their demographic characteristics prior to individual interviews. The demographic profile of the participants included the following:

- Age – the sampled participants' age ranged from 41-59 years old with the mean age of 43 years.
- Parity- the parity ranged between 0-3. It was included to assess if it will have impact on enhancing implementation of EPI programme
- Year of training on R48 programme – participant training ranged from 1996 – 2016. It was included to investigate the inclusion of EPI theory and practice during class and experiential learning outcomes.

4.3 FINDINGS

The findings of the study were based on the unstructured one-on-one interviews proceedings. The participants' responses were captured by means of a voice recorder and written field notes.

4.4 DISCUSSION OF THEMES, SUB-THEMES

Table 1 presents the themes and sub-themes that have emerged during data analysis using Tesch's open coding method. The themes and the subthemes are reflecting the perceptions of the R48 trained professional nurses on the implementation of EPI programme in Tshwane District

Table 1: Themes and Subthemes

MAIN THEMES	SUB-THEMES
1. Dominant stories related to perceived aspects of the EPI training	1.1 Lack of existence of integration of theory in practice outlined 1.2 The EPI programme perceived as important for training of R48 professional nurses. 1.3 The implementation of EPI viewed as beneficial leading to reduction of diseases. 1.4 Integration of EPI with other programmes perceived as important in managing childhood illnesses. 1.5 Existence versus lack of support experienced from EPI programme managers. 1.6 Existence versus lack of in-service education on EPI updates lead to different consequences.
2. Practices of the trained R48 professional nurses related to implementation of EPI	2.1 Executed activities related to implementation of EPI programme outlined. 2.2 Activities to monitor infant's growth during EPI programme implementation outlined.

	<p>2.3 Precautions taken to eradicate anticipated childhood diseases described</p> <p>2.4 Reasons for referral to multidisciplinary team members, which lead to provision of holistic care, outlined.</p> <p>2.5 A description of activities carried by school health team during implementation of EPI</p> <p>2.6 Existence of catch-up strategies for missed vaccine outlined.</p> <p>2.7 Existence of EPI awareness campaigns, health education programmes and visits during different child health facilities mentioned.</p>
<p>3. Knowledge related to EPI implementation</p>	<p>3.1 Existing knowledge versus lack of knowledge related to implementation of EPI outlined</p> <p>3.2 Existing knowledge related to monitoring infants 'growth described</p> <p>3.3 A description of how knowledge acquired in class assist in the implementation of EPI.</p> <p>3.4 Existing knowledge versus lack of knowledge related to by the community , family and parents related to the importance of EPI</p> <p>3.5 Lack of knowledge related to the existence of outreach services described.</p>
<p>4. Challenges experienced during the implementation of EPI</p>	<p>4.1 Lack of adherence to scheduled appointments and follow-up care experienced.</p> <p>4.2 leaving children with care-givers described as problematic leading to missing scheduled EPI review dates</p> <p>4.3 integration of other strategies with EPI problematic leading to nurses' fatigued, burnout and stress</p> <p>4.4 Existence versus lack of integration of other strategies leads to poor health outcomes.</p>

	<p>4.5 Lack of EPI emphasis by nurses during interaction of mothers lead to lack of adherence.</p> <p>4.6 EPI implementation for children from other countries problematic.</p> <p>4.7 Shortage of vaccine experienced.</p>
<p>5. Description of strategies suggested to overcome challenges experienced during implementation of EPI</p>	<p>5.1 Initiation of awareness campaigns and their importance described</p> <p>5.2 Introduction of visits to different facilities taking care of children suggested</p> <p>5.3 Emphasis of health education related to EPI indicated.</p> <p>5.4 The importance of early ANC (Ante Natal Care) booking must be emphasised to pregnant women.</p> <p>5.5 Inclusion of EPI in the nursing curriculum outlined as important for success to implementation.</p> <p>5.6 The importance of workshops related to EPI updates outlined.</p>

THEME 1: DOMINANT STORIES RELATED TO PERCEIVED ASPECTS OF THE EPI TRAINING

The participants' perceptions revealed different perceptions in the presentation of the R48 programme wherein the researcher picked up lack of integration theory into practice at different levels of the course and ultimate implementation.

Sub theme 1.1: Lack of existence of integration of theory into practice outlined

The study established that the professional nurses revealed a need to be allocated specifically to EPI services during the course of training. Theoretical knowledge was good but needed to be reinforced by practical experiential learning. This exposition relates to integration of theory and practice to be implemented for deep engagement in the learning process.

Participant 1 "during *training we were never allocated in the EPI service to can be able to practice the implementation of immunization of children. We were taught about*

immunizing pregnant mothers and when to immunize children when they come to the clinic”

The findings implied that the R48 training programme has a practical gap, which professional nurses needed to fill. Mothiba and Tladi (2016:923) concur with the professional nurses that there is inequitable distribution of health workers.

Sub-theme 1.2 The EPI programme perceived as important for the training of R48

The professional nurses acknowledged the importance of inclusion of EPI programme in the R48 training course. It equipped them with knowledge of vaccine preventable diseases, types of vaccines and the sites of immunization administration according to the EPI schedule.

“I learned about EPI, I gained more information during training and it made it easy to implement”. The other participant experienced beneficial knowledge on the sites of administration. “In children less than 12months we inject on the thigh and those above one year we inject on the upper arm”.

The findings on the impact of training interventions on immunization provider’s knowledge and practice of routine immunization in Ibadan, South-western Nigeria, by Brown, Oluwantosin and Ogundeji (2017:1) revealed that improvement in the participants’ performance in the immediate intervention assessment can be attributed to the effectiveness of training.

Sub-theme 1.3: The implementation of EPI viewed as beneficial leading to reduction of diseases

The professional nurses viewed the implementation of EPI as beneficial leading to reduction of vaccine preventable diseases if immunizations are administered on time according to schedule.

Participant 3: since its implementation there is reduced disease; diarrhoea in young children and other communicable diseases”

The observation of this participant is supported by the study conducted by Cisse’, Breugelmans, Mamadou, Diop, Faye, Mhlanga, Mueller, Koffi, Bradford & Gessner (2010:499) on Elimination of Haemophilus influenza type b Meningitis following administration of Hib conjugate vaccine to children under five in Dakar region of Senegal.

Hyde et al (2012:24) concur with the professional nurses that reduced disease incidence led to decline in the use of vaccine preventable disease – related curative health services, the study further revealed that an important benefit to the health system was facilitated by the widespread use of the auto-disabled syringes and awareness of the importance of injection safety.

Sub-theme 1.4: Integration of EPI with other programmes perceived as important in managing childhood illnesses

The professional nurses in the study viewed integration of EPI with other programmes as being beneficial in managing childhood illnesses.

“mmm..., when it comes to monitoring, I become very cautious because I make sure I focus, because you may miss things like undescended testis, which may affect the child at a later life. If you do not screen the child fully every three months or so for any developmental problems e.g. not growing well, even if they appear well, those babies may present with cardiac failure problems. I refer them to receive special attention early”

“Developmental screening and deworming is good, you identify under-development, if it was not integrated these children will be missed”

The study conducted by Mahomed and Asmall (2017:1) concurs with the subtheme on integration successes on professional nurses’ perceptions and experiences with implementation of integrated chronic care model at primary healthcare clinics in South Africa. The findings noted the improved process of care, better level of interaction with patients, improved level of knowledge and better teamwork coupled with an improved level of satisfaction with the work environment at the clinic after implementation of integrated chronic disease model. The study conducted by Haskins *et al.* (2016) on fragmentation of maternal, child and HIV services: A missed opportunity to provide comprehensive care revealed that fragmentation of services has been criticised for increasing cost, providing poor quality care and fostering poor health outcomes. The study further reported that patients are more dissatisfied with healthcare within systems where fragmentation is greater.

Sub-theme 1.5: Existence versus lack of support experienced from EPI programme managers.

The professional nurses viewed support of programme managers as scanty and sometimes not evident enough.

“mmm..., laughs... to be honest, I only saw one, I don't know why she was here for. They do not visit regularly. I only contact them if I have challenges or measles suspect, I do ask those who have attended the in-service. They are not regularly available”.

According to van Rensburg (2012:168), the manifestations and levels of inefficiency in the public health system, are repeatedly blamed on inadequate stewardship, oversight and leadership at national and provincial levels, wrong or misplaced priorities, and inadequate management capacity skills, postponement or paralysis in decision-making and action taking, and inappropriate, centralised structures in the public sector.

Wiysonge et al (2012: 1) stated that health workers have insufficient knowledge of vaccines and immunization, the public anti-immunization rumours resulted in reluctance of parents to bring children for immunization, and the health system that is bugged by insufficient financial and human resources are the challenges they are faced with in the EPI implementation.

THEME 2: PRACTICES OF THE TRAINED R48 PROFESSIONAL NURSES RELATED TO IMPLEMENTATION OF EPI.

The study revealed practices of the R48 trained professional nurses within the comprehensive primary health care service delivery. The professional nurses utilized the comprehensive approach of assessing the child's health needs in line with the integrated management of childhood illnesses (IMCI) and the prevention of mother to child transmission of HIV (PMTCT) in order to identify early HIV and TB related conditions that may be transmitted to the child and to implement investigation procedures and treat according to the outcomes of the results.

Subtheme 2.1: Executed activities related to implementation of EPI programme outlined

The participants reported that implementing EPI with related strategies of growth monitoring, administration of Vitamin A and Deworming, and developmental screening were done during the immunization visit. The integration of other programmes proved to be beneficial in caring for the child within the same room during the same visit.

“I think it is important to do IMCI and PMTCT programmes during immunization visit, we don't lose the patient, we do everything, immunization, growth monitoring, deworming and check if the child is not well in the same room. It is good for the caregiver is not tossed around”

Setswe et al (2011:10) noted the comprehensive primary health service package for South Africa that was introduced as the integration of service Policy enacted in 1996 with the aim of increasing health service utilization by increasing the accessibility of all services at primary healthcare level. Integrated primary healthcare consists of the following three categories that encompass an integrated primary healthcare structure:

- Comprehensive health care
- Supermarket approach
- One-stop shop.

In support of the above initiative, the Gauteng Department of Health, Strategic Plan 2015/16 to 2019/10 has as its objective to transform primary health care through broader access and better quality. They further intend prolonging and improving the lives of people living with Human Immunodeficiency Virus (HIV), sexually transmitted infection (STI)'s and Tuberculosis (TB) by ensuring the right medication and services are available and increase awareness on how to use them.

Subtheme 2.2: Activities to monitor infant's growth during EPI programme implementation outlined

The study revealed that professional nurses are able to manage conditions comprehensively presenting with poor weight gain when they are in for immunization visit.

“eeih..jaa...sighs...Its very sad to manage a child who has not weighed over a long time and you meet him with low weight at a later stage. If you find that he is severely underweight you refer, if mild, we give porridge. It depends on how low the weight is, you give 2weeks or a month's return date to monitor weight. We ask the mother what she is feeding the child”

The Department of Health IMCI chart booklet (integrated management of childhood illnesses) (2014:31) strategy equips the professional nurse with knowledge of assessing, classifying malnutrition in order to determine if the child can be managed at primary health

care level or be referred for specialised care. This strategy weaves in the expanded programme on immunization including growth monitoring and developmental screening to ensure comprehensive management at one visit.

In their study, Bila, Moser, Blanco, Spigt & Dinant (2014: 441) came up with findings - that the practitioner explained the benefit of growth monitoring in broad terms, such as, to keep the child healthy, to introduce appropriate child feeding practices, to reduce under nutrition and child death and to monitor growth. Few mothers highlighted benefit of the practitioner in relation to proper child growth and mental development and its long-term effects such as future academic performance and skills.

Subtheme 2.3: Precautions taken to eradicate anticipated childhood diseases described

The professional nurses revealed that the integrated approach ensures precautionary measures that include early identification of signs and symptoms of anticipated childhood diseases, for example, a child exposed to maternal infections of HIV. The identified child with suggestive clinical manifestation of HIV will be able to receive Cotrimoxazole prophylaxis while awaiting the test results.

“I do not have a problem of integrated approach in EPI as it gives you responsibility; it gives you a chance to check all spheres relating to prevention of mother to child transmission of HIV, immunizations, the child’s developmental milestones. It requires more time and you should be awake. A child comes with a temperature of 38 degrees Celsius, you attend to the sickness, it opens your eye that child should be screened for HIV using PCR, and if exposed you commence prophylaxis”

Another participant said: “since EPI was implemented there are reduced numbers of diarrhoea with introduction of Rotavirus vaccine”.

Baker (2010:90), researching on the impact of new vaccines concurs with the participants that the introduction of rotavirus vaccine led to reduction of deaths due to diarrhoea in 10000 patients by a third, thus effective vaccine administered to infants could therefore save many lives. South African is the first African country to include pneumococcal and rotavirus vaccines in the EPI

Subtheme 2.4: The reasons for referral to multi-disciplinary team members, which led to provision of holistic care

The professional nurses viewed referral of conditions that needed further investigation and specialised care as an integral beneficial part to the immunization programme. Setswe et al (2011:12) concurs with the professional nurses in that clients may be referred to the next level of care if their needs fall beyond their scope of competence as part of integrated package of primary health care approach.

“We check the immunization, weight and length, if the child is not growing well we refer, we involve the dietician for advice and food parcels.

“The ward based outreach team refer identified children within families at community level to the primary health care facilities for provision of care”

“I identified undescended testis, or failure to grow in a child who may appear clinically well, it may be due to cardiac problems. I refer to receive specialise care”

The IMCI strategy guides the professional nurse to refer children classified with not growing well for further investigation at secondary level of care following counselling and testing for HIV and TB should the results come out negative. Treat for worms before referral, as worm infestation is contributory to weight loss in children. IMCI char booklet (2014: 31).

Barron (2016:120), researching on the implementation of primary healthcare re-engineering in South Africa noted that the evidence from many countries suggests that provision of home and community based health services and their links with the fixed primary health care facilities in particular are critical to good health outcomes. The author however also noted that this link is sub-optimal in the areas of maternal and child health. There may be inadequate training of the community health workers, inadequate support and supervision as well as the poor link between the communities based service and the fixed primary health care facilities.

Subtheme 2.5: A description of activities carried by school health team during implementation of EPI

All participants interviewed expressed positive outcomes of school health team with regard to updating immunization status of preschool children. Administration of the Human Papilloma Virus vaccine to the grade 3 or 9-year-old girls and referring those with missed opportunities, 6yrs and 12yrs booster doses to the nearest clinic.

The Integrated school health Policy (2012:12) of the Republic of South Africa, DoH, and package includes deworming, immunization and nutritional assessment for the school-going child. It also assesses and identifies cases of substance abuse, screening for prevalent communicable and non-communicable diseases to promote healthy development and good educational performance. Referral of identified health problems to the primary health care facilities and follow-up should be enforced to ensure achievement of positive health outcomes. The outreach ward based workers ensure that follow-up is adhered to reduce number of lost to follow-up cases.

Subtheme 2.6: the existence of catch-up strategies for missed vaccines outlined

In this study, the professional nurses reported observation of defaulter rate that occurs as a pattern. It occurs between 6 and 14 weeks and after catch-up it is noticed from 6 months as the schedule of measles vaccination has changed from nine and 18 months to six and 12 months. One participant attributed the pattern to mothers returning to work leaving children with caregivers at the crèche or with relatives.

“The mothers take the children to the crèche or leave them with “mmatswale” (mother-in-law) or the granny who do not bring the child to the clinic for vaccines”

“Looking at the records of children expected to returning for immunizations, a pattern of defaulting can be noticed. After birth BCG and Polio drops, they come for six weeks, you expect seeing them at 10 weeks, you start seeing a decline, the same thing occurs at 14 weeks a further decline, if too much, we start doing a follow-up, check immunization cards at crèches and involve the health promoters to inform mothers to bring children for immunization”.

The DoH, Vaccinator’s Manual (2014:41) provides the professional nurse with catch-up programme to up-date the missed immunization opportunities.

The study conducted by Jonker and Stellenberg (2014:1) indicates varied experiences that not all mothers received information about the Road to health book or card. They reported that integrated child health services were not practiced resulting in missed opportunities in immunization, provision of Vitamin A, absence of growth monitoring, feeding assessment and provision for nutritional advice.

Subtheme 2.7: The existence of EPI awareness campaign, health education programmes and visits during different child health facilities mentioned.

The professional nurses in the study revealed existence of awareness campaigns and health education programmes amongst health care providers and the community. The health education given by Ward Based Outreach Team was also viewed as beneficial.

“We are having outreach programmes; ward based outreach team under the primary health care re-engineering, Non-governmental organizations (NGO) that identify immunization needs at community level within families and they refer to the nearest clinic for updating the status of the child or management of illnesses picked up. The school health team also refer children with health problems that if not managed early shall impact on the child’s educational progress and missed immunization opportunities”.

The study conducted by Imoh (2013:78) on Communication for social mobilization: an evaluative study of immunization campaign in Nigeria; concurs with the above participant that mass campaign strategies proved to be most effective for reaching both rural and urban dwellers and specific groups with immunization messages. The alliance between health workers and community leaders, social groups, NGO’s, and the information education sectors, had a multiplier effect on campaigns and helped create solidarity. The study concluded that the sustainability of the programme entails more integration, more collaboration, more institutionalization, more quality verification, more decentralisation, greater political commitment and multi strategic approach to campaign planning and implementation.

THEME 3: KNOWLEDGE RELATED TO EPI IMPLEMENTATION

The study revealed the knowledge the professional nurses had gained during R48 training.

Subtheme 3.1 the existing knowledge versus lack of knowledge related to implementation of EPI outlined

The professional nurses viewed themselves as having knowledge gained during training that is enriched by updates from colleagues who attended in-service training.

“We were taught about immunizations, mostly kids below 12months we give immunizations on the thigh and one year and above we give on the upper arm. Some have come for updates. Those who are allocated in EPI fast queue are targeted; those who are at integrated services get information on updates when they come back. Every Tuesday we have a meeting, they give us feedback”

The study by Brown (2017:1) on the impact of training interventions on immunization providers' knowledge and practices of routine immunization in Ibadan, Nigeria, which concurs with the participants that training, has a positive impact on significantly improving implementation of routine immunization practices.

Contrary to the study conducted by Wiysonge et al (2012:101) on Advances in childhood immunizations in South Africa: where to now? Programme managers' views and evidence from systemic reviews that identified challenges linked to health worker insufficient knowledge of vaccines and immunizations, the public linked to anti-immunization rumours and reluctance from parents and the health system that is linked to insufficient financial and human resources.

Subtheme 3.2: the existing knowledge related to monitoring infant's growth described.

The professional nurses displayed knowledge of the importance of growth monitoring during implementation of EPI during the study.

“It is very sad to attend to a three year old child whose weight was last monitored at eighteen months or so and he is underweight, you use the IMCI (Integrated management of childhood illnesses) strategy

Scherdel (2013:67) referred to Garner who summarised the growth monitoring as having paradigms namely:

- health professionals regularly measure the height and weight of children
- they plot the information on a growth chart
- when growth is abnormal, they start appropriate investigations
- as a result, a serious condition is diagnosed early
- The prognosis is improved by the early diagnosis.

They further argued that, although it is accepted worldwide, it raises many questions about different methods used from one country to the other.

According to Van Rensburg (2012:219) malnutrition remains one of the major causes of child morbidity and mortality in South Africa so much so that child nutrition has been identified as a priority area of health intervention. Integrated Nutrition programme, an intersectoral approach has been introduced to address nutritional deficiencies in women and children and the implementation of Primary school Nutrition programme.

Subtheme 3.3: A description of how knowledge acquired in class assist in the implementation of EPI

Professional nurses acknowledge that training has equipped them to do correct observation and use the signs of illnesses prevalent in children under five. They are able to implement the disease surveillance procedure related to immunization activities, for example, when a child presents with fever, conjunctivitis, runny nose and generalised rash, need to be investigated for measles.

“The knowledge I gained during training make it simple for me to implement EPI. When a child present with signs of rash and coughing, and suspect measles, you talk to the EPI coordinator to confirm the steps to take to investigate and manage the child correctly”

Oku (2017:6) concurs with the participant with regard to health workers who received training, and are able to communicate routine immunizations and apply EPI interventions with ease. The added multiplier is when they know the language that the community uses

which improves communication during vaccination campaigns the health worker will also receive updates and further training to communicate to the community.

Subtheme 3.4: the existing knowledge versus lack of knowledge related to community, family and parents related to the importance of EPI

The study revealed that the professional nurses viewed the caregivers as not knowledgeable about the vaccines that the child is due for and which disease they are preventing.

“Some parents do not care about the immunization they only know that they must bring the child for immunization; they don’t know what vaccine is given for which disease. I for one took advantage that as long as they have passed grade 8, they can read the RTHB and understand. Maybe it is because we do not explain the details”.

The Vaccinator Manual (2014:154) has been developed to guide the professional nurses in explaining the vaccine preventable diseases for each vaccine; it further urges the provider to explain to the parents in their own language to make it clearer (Matsoso 2014:124)

Subtheme 3.5: the knowledge related to the existence of EPI outreach services described.

All professional nurses have the knowledge of the outreach programmes in relation to implementation of EPI

The National Strategic Plan 2010/11 to 2012/13 set out the goal of 95% coverage for the fully immunised children under one year by end of 2013. To enable achievement of this goal, the Reach every District strategy was designed focusing on districts and communities that are hard to reach. The primary health care facilities implement the mobile clinic approach to reach children at these areas. Integrated school health Policy (ISHP) 2012; has been rolled out to identify children with needs and missed opportunities of immunization programme. The inclusion of Primary health care re-engineering approach, has the Ward Based Outreach team (WBOT) that operates at family level to also identify children who missed immunizations and refer them to the clinic.

The study conducted by Zondo (2013:3) on the implementation of Primary Health Care re-engineering in South Africa was intended to focus on the three streams of ward based Primary health care outreach team in each electoral ward, strengthening school health services; and district based clinical specialist teams to focus on improving maternal and child health.

THEME 4: the challenges experienced during implementation of EPI

Expanded programme on immunizations (EPI) was introduced in South Africa in 1995. Since then new vaccines have been added to the programme based on surveillance outcomes and disease burden related to vaccine preventable diseases. Baker (2010) conducted the study on the face of South Africa's Expanded Programme on Immunization (EPI) schedule

Subtheme 4.1: the lack of adherence to scheduled appointment and follow-up care experienced.

The professional nurses in the study observed defaulter rate in relation to scheduled EPI follow-up dates coupled by lack of understanding the road to health book or card. Missed immunization opportunities expose the child harmful complications if they can be exposed to any communicable disease.

“Some mothers or care givers say they did not know that they must bring the child for EPI follow-up. I think it is because we only write the follow-up date and not communicate verbally the return date”.

“I thought they are able to go through the Road to Health Book or Card and they will see the return date. I took for granted that if they passed grade 8 they can read and understand”.

The findings of the study on missed opportunities in child healthcare conducted by Jonker and Stellenberg (2014: 1) concurs with the professional nurses that not all mothers received information about the Road to health book or card. According to mothers, integrated approach is not done. The concept of “seamless health services” does not exist as far as immunization is concerned. The child was not immunized at the clinic and told to go to the private doctor who does not give immunizations or do growth monitoring.

Subtheme 4.2: Leaving children with caregivers described as problematic leading to missing scheduled EPI review dates.

The professional nurses missing follow-up dates was due to mothers having to go back to work and leave the child in the care of the crèche, mother-in law or the granny. One participant said that she took for granted that the parents can read the road to health card and understand the remedies of diarrhoea in the booklet about oral rehydration solution even if it was not verbally communicated.

“Some mothers go back to work and leave the children at the crèche and they say they do not get time to bring the child to EPI visit”.

“Other mothers leave the child with “mmatswale” (mother-in-law) or the granny without informing of the return date. What makes me sad is when there is ill and is left with the granny who will give the child “muti we nyoni” (traditional remedy for diarrhoea and poor feeding) if the child has to come back disease follow-up”.

The study conducted by Jonker et al (2014: 5) revealed that mothers should be given the information on aspects that will enable them to care for their children. The Road to health book or card is an excellent source of information for mothers. However, it was found that the omission to explain the card could imply that the mothers were not enabled to assess the health of the child or practice preventative healthcare in order to improve their child's health”

Subtheme 4.3: Integration of other strategies with EPI problematic leading to nurses' fatigue, burnout and stress.

The professional nurses in the study viewed the integration service as stressful. However, they expressed the importance of having to utilize the visit to maximise the benefits of the mother and child health care programme. The importance of data recording was not compromised.

“ Hmmm.....laughs....integrated services is hectic, you spent more time with one child, 45-60 minutes especially if it is immunization, the mother is on HAST (HIV and AIDS, Sexually transmitted infections and Tuberculosis) also an integrated approach, and you have to do PCR (Polymerase chain Reaction) test if the child is exposed. It takes long

and the ones in the queue complains, but you must do it,” other participant also said “I had challenges...its stressful and strenuous and you end up feeling strained that you have seen many children, not doing everything. I feel one should have a partner to share the chores, giving injections, doing MUAC (Mid upper arm circumference) going back to stats form”.

Bam, Marcus, Hugo and Kinkel (2013:1) concur with the professional nurses that integration of services approach that although it may be stressful as participants expressed, it is geared towards being cost effective; community oriented conceptualised primary care that will assist the country to achieve public health outcomes through disease prevention and health promotion.

The study on fragmentation of maternal, child and HIV services by Haskins, Phakathi, Mntambo, Wilford and Horwood (2016: 2) findings revealed that fragmentation increases costs, providing poor quality of care and fostering poor health outcomes.

Ngxongo and Sibiyi concur with the professional nurses in their study on factors influencing successful implementation of the basic antenatal care approach in primary health care facilities in eThekweni district, KwaZulu-Natal (2013). Their findings noted that the large number of programmes integration was interfering with their performance.

Subtheme 4.4: the existence versus lack of integration of other strategies leads to poor health outcomes.

The professional nurses viewed integration of services during immunization visit as an opportunity to identify other developmental health related problems and diseases that may affect the child or delay educational progress in future. They support the notion of early identification, and early positive management outcomes

“Fast EPI queues are not good. You miss to do proper developmental screening. You can miss like undescended testis, which may come and affect the child in future.

The study conducted by Bam et al (2016:54) concurs with the participants in that mother reported taking a child to the doctor, they are not weighed or given Vitamin A or immunizations and this indicates poor health outcomes related to EPI and IMCI strategies of health care.

Subtheme 4.5: Lack of EPI emphasis by nurses during interaction of mothers lead to lack of adherence.

The professional nurses viewed the gaps that occurred between the new EPI schedule and the Road to health book and Card as contributory to lack of adherence to follow-up exacerbated by lack of emphasis by the providers of the programme.

“ehh...some of the mothers do not know what the baby is getting, some know that measles is given at 9months, they do not know about the 6 and 12months measles, the road to health booklet still has the old schedule of 9 and 18months measles. So they do not come after 14 weeks waiting for 9months”

Matsoso (2014:109) emphasises acquiring essential information about immunization. Mixed messages and incorrect information undermine the immunization programme implementation.

Subtheme 4.6: the EPI implementation for children from other countries problematic.

The professional nurses viewed implementation of EPI with regard to children from other countries as having challenges in respect of language of the parents and language used on the chart as well as the EPI schedule.

“It is a challenge with children from other countries. You cannot read the language used on the chart and the schedule is not the same as the South African EPI schedule”.

“eeih...jaaah... those who know English we try, some of our staff know Shona or Shangaan language. Ijoooh.. The Indians we are helped by their husbands. We communicate to the husband and they tell the wife, but we do not know what they said is exactly what we said. But they come for follow-up any way”

Oku, Oyo-Ita, Fretheim, Ames, Mulolwa, Kaufman, Hill, Cliff, Cartier, Bosch-Capblanch, Rada and Lewin (2015:14) conducted a study on Communication strategies to promote uptake of childhood vaccination in Nigeria. They reported that a wide range of communication approaches for childhood vaccinations have been adopted in Nigeria with the intention of improving vaccination coverage rates. The strategies included group education, health worker training, and use of local language to name a few. The study

also viewed communication used in routine immunization as being less frequent than that used in campaigns.

Matsoso (2014:108) concurs with the participants in that the health practitioner should be aware of the barriers in communication that may be present such as language and culture during implementation of EPI.

Subtheme 4.7: the shortage of vaccine experienced

The study revealed that professional nurses experienced a shortage of vaccines during immunization activities. They requested the vaccine the child is due for from other clinics if they have extra stock. Should there be no extra stock, the mother is turned back home and given another return date.

“We sometimes experience shortages of vaccine and we ask from other clinics. The mother or the care giver does not come back when turned away due to shortage of vaccines”

The findings of the study conducted by Hyde et al (2012:126) on: The impact of new vaccine introduction on immunization and health systems were: The published literature revealed that disruptions in routine vaccination services were related to insufficient on-hand stock of the new vaccine when programmes commenced, locally or at global shortages.

The study conducted by Mothiba and Tladi (2016:3) concurred with the above study on the challenge of vaccine shortage as well.

Daily Maverick (2017:89) revealed that three primary reasons why there is shortage of vaccines are staffing issues, problems with low health workers' skills and vaccination stock out (Saloojee 2017:97).

THEME 5: DESCRIPTION OF STRATEGIES SUGGESTED OVERCOMING CHALLENGES EXPERIENCED DURING IMPLEMENTATION OF EPI

The EPI is important in decreasing child morbidity and mortality rates because it focuses not only on immunization against vaccine preventable diseases, but also on screening for growth related diseases that if identified early may be treated to improve future growth and development.

Subtheme 5.1: Initiation of awareness campaigns and their importance described.

The professional nurses viewed awareness campaigns as beneficial towards achieving immunization coverage through a community oriented approach and social mobilization. The health education and awareness campaigns done by the school health team and the NGO's contribute positively to these initiatives. Community engagement and participation is a multiplier in the promotion of health care, The Alma Ata Declaration 1978 (WHO, 1978) on moving away from curative to preventative care. (Setswe, Naude' & Zungu. 2011:6)

“when you see the pattern of declining in number of children not coming immunizations at 10, 14 weeks, we start checking charts from the crèche, campaigns are done using health promoter to call mothers to bring children for immunizations” other participants said mothers default immunizations at the clinics knowing that during campaigns children will be immunised”

According to van Rensburg (2012:153) community involvement and participation contributes to support and promotion of health care system activities and health of communities. The author further notes that community involvement and participation in health care can assume numerous forms. It takes place at national, provincial, local and community levels through an array of consultative and advisory for a, councils, boards and committees characterised by varying degrees of formality, and including a wide range of stakeholders or interested people from the civil society, NGO's and local communities. The professional nurses viewed this as an approach that may reduce defaulter rate and relevant practices regarding expanded programme on immunization (EPI).

Setswe et al (2011:99) describes community engagement as part of a process to develop government policy, or build community awareness and understanding.

Subtheme 5.2: the introduction of visits to different facilities taking care of children suggested.

The study revealed that the professional nurses viewed visiting the facilities taking care of children as important, to check the immunization status and prophylaxis in cooperated in the EPI services

“When we notice the pattern of a decline in follow-up especially before 6months, we start doing campaigns, check copies at the crèche and then you go and give children immunizations”

The point of view of professional nurses concurs with the COPC (Conceptualizing Community Oriented Primary Care) model on health posts referred to as ward based outreach teams geared towards interaction with families to promote health, detect early health needs of the families and support treatment programmes. (Bam, Marcus, Hugo & Kinkel 2013:1)

Subtheme 5.3: the emphasis of health education related to EPI indicated.

The professional nurses considered communicating the content of the road to health book or card verbally to the mother during the immunization visit important. Focus should be made on new vaccines and the schedule that has changed referring to measles vaccine that has changed from nine and 18months schedule to the 6 and 12months new age schedule. This was viewed as also demanding from the professional nurses despite the mother’s educational level to ensure that the mother actually understand the information given and written in the road to health book or card.

“I for one took it for granted that mothers can read through the road to health book. They will see and understand the return date and the immunizations due for the next visit” “With Indians we communicate with the husbands as they can understand English. They tell the wife but we do not understand what they say. But they come for follow-up”.

The study conducted by Jonker *et.al* revealed that not all mothers received information about the road to health book, integrated child health care and that contributes to defaulter rate.

Matsoso (2014:109) emphasises health education related to date of next immunization, outstanding doses, and side effects and how to manage, giving a written reminder of next visit in the Road to health book. The health education should be short but enough.

Imoh et al (2013:54) concurs with Matsoso (2014:69) that sustainability of the programme lies in more integration and collaboration that is more intersectoral, more institutionalization, more quality verification, more decentralization, greater local political commitment and a multistrategic approach to campaign planning and implementation

Subtheme 5.4: The importance of early ANC (Ante Natal Care) booking must be emphasised to pregnant women.

The study revealed that the professional nurses viewed early antenatal care booking as equally important in the implementation of EPI. According to the Guidelines for maternity care in South Africa (2015:33) the best possible pregnancy outcomes for women and babies can be achieved by screening for pregnancy problems that may arise during the antenatal period, for example communicable diseases, lifestyle habits that may affect the baby's growth.

“The professional nurses acknowledged learning about early booking as including EPI practices, administration of tetanus toxoid to the mother”.

“We learned about the importance of early booking of the mother for ante natal care which affords the mother time to receive tetanus toxoid immunization to prevent neonatal tetanus”

The findings of the study conducted by Ngxongo and Sibiyi (2013:457) on factors influencing successful implementation of the basic antenatal care approach in primary health care in eThekweni district of KwaZulu-Natal, ensures availability and accessibility of the basic services, a comprehensive package of and the integration of primary health care services, training and in-service education.

Swarnkar, Baig, Soni, Shukla and Ali (2016:954) on assessment of knowledge and practice about immunization among health care providers concurs with the view of the participants that when trainees were assessed it was found that most health workers know about the diseases prevented by vaccination.

Subtheme 5.5: Inclusion of EPI in the nursing curriculum outlined as important for success to implementation.

The professional nurses viewed the importance of being placed in the EPI service during training to integrate real immunization practices with the knowledge gained in class. What

is learned in class should be practiced in real situation to create deep engagement and successful implementation in future.

“I have learned about EPI during theory training, but we never placed in EPI services during clinical practice. I wish that students can be placed in the EPI services”

The study conducted by Mboera, Ipuge, Kumaliya, Rubona, Perera, Masanja and Boerma (2015:324) on Midterm review of national plans: an example from the United Republic of Tanzania findings that availability of training of staff, guidelines, oral rehydration salts, Cotrimoxazole suspension and vitamin a capsules contribute to achievement of set childhood targets.

Haskins et al (2016:584) revealed that the role of the health workers in providing comprehensive package of care to mothers and babies need to be clearly defined and optimised within the designated scope of practice for each health worker. The study showed that enrolled nurses played a central role in the provision of well-child services, but they are excluded during training courses which are attended by professional nurses only.

Brown et al (2017:721) concur with the participants in that training of primary health care providers on immunization has the potential of building their capacity for efficient service delivery, mobilizing people to generate demand for monitoring program performance.

Sub theme 5.6: The importance of workshops related to EPI updates outlined.

The study revealed that in-service training should be given to all practitioners even those who are doing integrated services. Lack of up-dates in EPI implementation leads to missed opportunities in line with introduction of new vaccines and changing immunization schedule.

“Updates on catch-up programme is an old one, those who attended in-service reported that there is a new one still to come to the services”.

“With in-service training those who are in EPI services are targeted, we only get feedback when they give report in Tuesday meetings” “When you are seeing a child, and you

suspect measles, you ask those who attended in-service for new practices or we phone the programme managers, and they help us”

Swarnkar et al (2016:423) suggest that quality refresher training for health workers is essential to improve their knowledge and practice and ultimately quality of immunization services. The findings by Ngxongo et al (2013:427) indicated that in-service education and workshops for personal development should regularly be conducted. The in-service or workshop must match their scope of practice to ensure successful programme implementation.

4.5 DATA SATURATION

According to Grove et al (2015:274) indicate that the number of participants in a qualitative study is adequate when saturation and verification of information are achieved in the study area. They further emphasize that saturation of study data occurs when additional sampling provides new information. Saturation of data in this study was achieved when the first eight participants came up with same information.

Saturation of data was achieved related to the major themes and all sub themes, this is confirmed through identification of verbatim quotes from the transcripts provided used in the analysis and also five themes and more sub-themes that emerged during data analysis.

4.6 CONCLUSION

This chapter has outlined the findings that emerged from the interviews of professional nurses conducted in order to answer the research questions. This chapter contains data from the eight participants' interviews and literature control for the subthemes that emerged during data analysis. The findings of the study indicated that there is a need to integrate theory of EPI with practice by placing the student at EPI services for real exposure to implementation of immunization activities. The challenges that affect successful programme implementation were viewed as lack of support from programme managers; differences in the EPI schedule amongst countries; and lack of Multilanguage

proficiency. Regular in-service geared towards update on new vaccines and immunization practices came forth as an added enabling factor.

The study by Xaba, Peu and Phiri (2012:25) on perceptions of registered nurses regarding factors influencing service delivery in expanding programmes in primary health care setting recommended that integration of programmes and coordination be done at a provincial level and planned together with the training centres in order to alleviate problems in service delivery.

The South African Health Review (2013/14:77) recommended effective provincial governance as the key to implementation of outreach teams. This includes the setting up of special implementation support and co-ordinating structures such as primary healthcare re-engineering task team, and the integration of planning and monitoring of outreach existing district, sub-districts planning, and review processes. The health review concurs with the introduction of the human papilloma virus (HPV) immunization as being suitable to implement due to its efficacy in offering protection against cervical cancer from the age of 9years, and that if correctly implemented it would improve overall vaccine coverage. The integrated school health team is implementing this initiative to the 9-year-old non-sexually active females to achieve the protection of young girls against cervical cancer (ISHP 2012:12)

Chapter 5 will deal with discussion of findings, implications, limitations and recommendations of the study in order to address some of the factors that arose from the interview.

CHAPTER 5

CONCLUSIONS, IMPLICATIONS, RECOMMENDATIONS AND LIMITATIONS OF THE STUDY

5.1 INTRODUCTION

The researcher discussed the findings that emerged from the analysed data regarding the perceptions of R48 trained professional nurses with regard to implementation of EPI in the Tshwane District of Gauteng Province. Themes and subthemes were discussed and complimented by literature control. The recommendations for the themes and sub themes in Chapter 4 are formulated and the recommendations are aimed at enabling the health care professionals to provide quality integrated childcare when they implement the expanded programme on immunization. The limitations of the study that emerged when the explored perceptions were described are also discussed.

This chapter will further discuss the implications the study has on the nursing practice, nursing education and nursing research.

5.2 CONCLUSIONS OF THE STUDY

A qualitative study was conducted using the exploratory and descriptive research design. The study explored perceptions of R48 trained professional nurses with regard to implementation of EPI in the Tshwane District of Gauteng Province. Individual interviews with audio recorder and field notes taking were used to collect data. The ethical consideration of voluntary participation, informed concern and anonymity were adhered to throughout the study. The independent coder analysed the data from which themes and subthemes emerged. The purpose of the study was achieved, research questions answered and objectives of the study attained.

5.2.1 Purpose of the study

The purpose of the study was to explore the perceptions of the R48 programme professional nurses with regard to implementation of the Expanded Programme of Immunization in Tshwane District, Gauteng Province.

5.2.2 Research questions

A grand tour question was asked: What are your experiences during training on expanded programme on immunization?

How do you find implementation of EPI following training?

Probing questions were asked aligned to the participant's response.

Rephrasing of questions was done and the participant asked for clarity or asked the researcher to repeat the question.

5.2.3 Research objectives

The research objectives were to:

- Identify the perceptions of the R48 programme professional nurses with regard to implementation of the Expanded Programme on immunization in Tshwane District Gauteng Province.
- Describe the perceptions of the R48 programme professional nurses with regard to implementation Expanded Programme on Immunization in Tshwane district Gauteng Province.
- Make recommendations on the findings of the study.

5.2.4 Methodology

The study followed a qualitative, exploratory and descriptive research design that enabled the researcher to conduct participant interviews. The interviews were conducted in order to explore and describe the perceptions of professional nurses with regard to EPI implementation at primary health care level.

The target population in this study were professional nurses who were implementing the expanded programme on immunization in maternal and childcare services in the Tshwane District of Gauteng province.

Semi-structured, one-on-one interviews were conducted in the consulting rooms for the participant to explain the phenomenon that was being studied.

The interviews were conducted in the participant's consulting room and this created a relaxed atmosphere between the researcher and the participant. Issues of ethics were taken into consideration. Measures to ensure trustworthiness were followed. Tesch's method of data analysis was used to analyse data Polit and Beck (2012:570). From the analysed data, 5 themes and 35 subthemes emerged.

Tesch's open-coding method of qualitative analysis was used to analyse the collected data. An independent coder analysed verbatim transcripts of data. Measures to ensure trustworthiness were followed. The criteria of Lincoln and Guba's model of trustworthiness were ensured with the purpose of maintaining quality of the research study by adhering to the criteria of credibility, transferability, dependability and conformability (de Vos et al 2012:421)

5.2.5 Findings of the study

Participants shared similar experiences with regard to training on the EPI programme and its implementation. They emphasised that the training was beneficial as it assisted them with implementation in real situations. Some participants felt they could have been placed in EPI services at facilities during training to integrate theory with practice before the completion of training. On the other hand, participants emphasised integrated approach of EPI with other child health care programmes as beneficial for early identification and management of childhood health problems that may affect child's development and academic progress later in life.

The EPI implementation is based on integrated health activities of immunization, growth monitoring, developmental screening, and deworming and Vitamin A prophylaxis. The participants however indicated shortage of vaccines and lack of support from the EPI programme managers.

The professional nurses also viewed the integrated approach that involved prevention of mother to child transmission of HIV within the EPI as beneficial for early detection and subsequent treatment initiation should the child PCR test results turn positive. Some of the professional nurses made mention of the integrated management of childhood illnesses strategy as important as the immunization status of the child is assessed and update while simultaneously managing the presenting health problem.

The importance of regular support from other programmes such as integrated school health care and the ward based outreach team is to identify missed immunization opportunities and referring the child to the nearest clinic for updating the immunization status by drawing a catch-up programme according to the identified needs.

Some participants viewed interaction with mothers from other countries and their immunization schedule as problematic even though that did not hinder them from rendering the immunization services as needed by the child to protect him/her from vaccine preventable diseases. Engagement of husbands was viewed as beneficial in interaction with Indian mothers as the husbands interpreted the immunization activities, return dates and follow-up care to the mothers. They adhered to immunization follow-up, which strengthened the belief that that communication strategy bridged the communication gap.

Five themes and their subthemes emerged during Tesch's open coding method of qualitative data analysis and are summarised.

Theme 1: Dominant stories related to perceived aspects of the EPI training.

Six subthemes emerged from the theme. The professional nurses perceived training on EPI programme as important though it lacked integration of theory with practice. Most of the professional nurses viewed implementation of EPI as beneficial leading to reduction of vaccine preventable diseases. The integration of EPI with other programmes was perceived as important in identifying early and managing childhood illnesses including referral of conditions beyond their scope to specialised next level of care. The integrated approach also affords the child the opportunity to receive missed immunization through a well-structured catch-up programme. The expansion of the EPI programme to the school health services was viewed as beneficial for the learners as it encompassed child survival strategies of feeding scheme to eradicate malnutrition and under feeding health related problems. Some of the professional nurses experienced lack of support from EPI programme managers. Mixed experiences of existence and lack of in-service education on EPI updates lead to different consequences.

Theme 2: Practices of the trained R48 professional nurses related to implementation of EPI

Seven subthemes emerged from the theme. Execution of EPI related activities was outlined coupled with monitoring of infant's growth during implementation of the programme. Professional nurses emphasised that precautions were taken to eradicate anticipated childhood diseases that may present with faltering weight in line with the principles of integrated management of childhood illnesses. Some professional nurses outlined the referral of children who needed specialised care as beneficial for the child's health problems. Professional nurses' experience indicated activities of the school health team as important in the implementation of EPI. Mention was made of existing visits to the different child health facilities during EPI awareness campaigns. The objective of the visit is to evaluate the immunization record and plan for catch-up program on the identified missed immunization and prophylaxis administration opportunities as well as developmental screening for delayed milestones.

Theme 3: Knowledge related to EPI implementation

Five subthemes emerged from the theme. The professional nurses described how the acquired knowledge in class assists in the implementation of EPI activities related to growth monitoring and developmental screening in infants and preschool children. There were, however, those professional nurses who indicated mixed experiences of existing and lack of knowledge related to by the community, family and parents to the importance of EPI, for example those mothers who did not know what vaccine is due for the age of the child she brought on that day. This view was related to poor adherence to immunization return date and follow-up for growth monitoring. Some of the professional nurses experienced lack of knowledge related to the existence of outreach services.

Theme 4: Challenges experienced during the implementation of EPI

Seven subthemes emerged from the theme. Professional nurses described lack of adherence to scheduled appointments and follow-up care to be honoured by caregivers as children were left with caregivers. The children left at the crèche by working mothers

missed immunization opportunities as professional nurses reported that there are no visits done to these childcare institutions. Some of the professional nurses experienced burnout, fatigue and stress related to integrated approaches when implementing EPI although if the approach is not implemented it leads to poor health outcomes. Other professional nurses highlighted the interference of the granny or mother –in-law in management of childhood illnesses resulting in the child not brought back for follow-up and monitoring of the identified health problem. Lack of interaction with mothers during immunization visits contributed towards lack of adherence to the programme. The interaction referred to communicating the importance of the visit, explaining the vaccine the child received and diseases the vaccine protects the child against, as well as care to the site of injection including return date for the monitoring of growth and next vaccines. The professional nurses experienced challenges of language and EPI schedule of children from other countries, which did not obstruct them from implementing the programme as they sought assistance from husbands, or colleagues that may try the language.

A shortage of vaccines was experienced during the implementation of EPI by the professional nurses. The professional nurses requested from other facilities if they did not have stock of vaccines.

Theme 5: Description of strategies suggested overcoming challenges experienced during implementation of EPI

Six subthemes emerged from the theme. The professional nurses suggested strategies to overcome the challenges experienced during the implementation of EP as follows:

- To initiate awareness campaigns and health education on different vaccines, when they are given, which disease each prevents and the return date for the next vaccine at what time. The awareness campaigns to be conducted together with the School health team, ward-based outreach teams and Non-governmental organizations.
- Introducing visits to different facilities taking care of children, health education related to EPI and workshops on EPI updates.
- The importance of early booking was indicated by some participants as related to the inclusion of pregnant mothers into the EPI programme.

- Professional nurses highlighted the need to include true placement in the EPI services in the curriculum to ensure successful implementation coupled with clinical experiential learning.
- They are however concerned about the irregular and sometimes non-existence of support from programme managers

5.3 IMPLICATIONS OF THE STUDY

There are implications that arose from the study related to nursing practice, nursing education and nursing research with regard to implementation of the expanded programme on immunization.

5.3.1 Nursing practice

There is a need to provide relevant evidence-based care to individuals, families and groups. In this study, families and the community need to be informed and supported when it comes to vaccine preventable diseases that may affect their loved ones. They however should be educated on the strategies that are incorporated into the EPI programme which are geared towards preventing anticipated health problems; that is the growth monitoring, immunization, developmental screening, deworming vitamin A prophylaxis, assessment of feeding and when to introduce solids. The contribution of the school health team and the ward-based outreach team should be appreciated and welcomed by the community as a vehicle to link the fixed primary health care facilities and the family units towards achieving the immunization outcomes as described in the Gauteng DoH Strategic Plan 2015/16 to 2019/20.

The EPI providers at National, Provincial, District and community levels should engage in regular support and both verbal and written communication to bridge the gap of vaccine shortages, EPI updates and disease surveillance as described in theme 4.

Although the EPI implementation differs according to countries, as is the types of vaccines, the engagement of health authorities should be sought at appropriate level of health care system to narrow the gaps in the EPI schedule for the promotion of the health in children.

Implementation of integrated school health policy, the integrated nutrition programme and the maternal and child health programmes are additional child health programmes, which

should be upheld as they contribute to positive child health outcomes. Strengthening the skills to utilize knowledge acquired to screen for communicable diseases through screening of mother or caregiver's health status and implementing investigative measures promptly to manage anticipated diseases should the test result turn positive.

By recognizing the contribution of crèches, grannies and mothers-in-law on childcare, professional nurses could be more sensitive to dissemination of information during the postnatal six-day and six-week visits. The mother should be informed about disseminating the immunization activities and the importance of adhering to return dates to those who will take care of the child when the mother returns to work.

The outreach programme team can include the crèches in their area of jurisdiction to identify children who need immunization and means of communication to the mother implemented through the person who brings the child to the crèche.

5.3.2 Nursing education

The nursing education curriculum should create experiential learning opportunities through integration of theory and practice to ensure deeper engagement in learning. Emphasis and focus on how communicable diseases present with their specific characteristics or clinical manifestations and formulation of differential diagnosis is indicated to strengthen disease surveillance at primary health care level.

Application of health policies should be included in the curriculum to orientate the professional nurses on integrated comprehensive approach to all individuals to contribute to management of disease burden. This is supported by the provision of Integrated School Health Policy 2012 and the Strategic Plan 2015/16 to 2019/20.

Application of the legal ethical framework should form part of the curriculum and a multiplier in integration of theory and practice as management at primary health care facilities should be in line with department of health policies, protocols and treatment guidelines. Allocation and delegation of responsibilities related management and implementation of integrated programmes should be in line with the scope of practice as determined by the quality assurance body; the South African Nursing Council (SANC).

Health education on the diagnosis, immunization status should form part of the non-drug management to empower individuals, families and communities on health related matters and for them to take responsibility. The health worker should be educated on different

health education approaches to the individual, family and community such as one-on-one education about the disease prevention and promotion of health, importance of self-care and adherence to initiated health interventions. The attitude and the values of the practitioner should be geared towards positive interaction and achievement of health outcomes.

5.3.3 Nursing research

Nursing research is needed to provide high quality learning within educational institutions on child survival strategies for the student and professional nurses. More research is needed on other health professionals, who implement EPI to come up with a more interactive, better-integrated communication for the success of the immunization activities.

Research on immigration health related practices with regard to immunization schedule is a gap that has financial implications but forms the root of successful child survival strategies. Further research to be conducted on factors that impact on communication in EPI activities and implementation in indigenous languages. The experiences and perceptions of grannies and mothers-in-law with regard to childhood illnesses and immunizations should be investigated as they have an impact on the approaches geared towards childhood survival strategies.

Research should also be conducted on factors influencing distribution of vaccines amongst facilities and within district to address unequal distribution and sustainable supplies overtime. Findings may assist in addressing vaccine shortages in districts within the same province.

Factors contributing to re-emergence of eradicated vaccine preventable diseases and poor eradication should be investigated as they undermine the EPI programme implementation.

The findings will be communicated to curriculum developers, policy makers, pharmacists, beneficiaries of EPI, and providers and implementers of the EPI programme.

5.4 LIMITATIONS OF THE STUDY

The following limitations were identified.

The research was conducted at two primary health care facilities, and that was in one district, therefore the findings could not be generalised to all districts in Gauteng Province. There is a need for further research in other districts and provinces in view of high cross border movement.

When identifying the inclusion criteria, the researcher was aware of the other categories of health professionals and primary health care workers who were excluded from the study.

Leading questions were asked which directed how the participants have to answer the questions as they asked for either clarity or rephrasing of the question.

According to Setswe et al (2011:376), unstructured interviews do not have a fixed and pre-determined list of questions. They start with one or two general questions aligned to the aim of the research and then the interviewer will ask appropriate follow-up questions to clarify or extend the ideas that the interviewee mentions.

5.5 RECOMMENDATIONS

From the findings of this study, the researcher proposes the following recommendations.

Theme 1: Dominant stories related to perceived aspects of the training on expanded programme on immunization (EPI)

- Positive perceptions on inclusion of EPI in the curriculum emerged from the study and showed that content taught is relevant. However, it lacks substantial integration with clinical exposure as identified by the professional nurses. There must be clear experiential learning outcomes within the integrated programmes offered during theoretical block. This should be planned according to credit allocation by the South African Nursing Council (SANC) regulation.

Theme 2: Practices of the trained R48 professional nurses related to implementation of EPI

The implementation of strategies within the EPI programme of growth monitoring, immunizations, health awareness campaigns on immunization related activities should be strengthened by regular up-dates and workshops

In-service and workshops on EPI up-dates should be scheduled in relation to scope of practice to strengthen health outcomes to individuals, families and the community.

Theme 3: Knowledge related to EPI implementation

Engagement of professional nurses in the policies introduced, which should be translated in services, should form part of the knowledge base in improving health outcomes. This refers to translating integrated school health policy, for example, to school health services in order to implement the assessment of and identification of health problems that may affect learning. To support this initiative the Integrated Nutrition programme is also translated into a service of feeding scheme at primary school to uplift the nutritional status of the disadvantaged children without taking them out of learning premises.

Theme 4: Recommendations arising from challenges experienced during the implementation of EPI

The following are some of the recommendations based on challenges experienced during implementation of EPI:

- Existence and lack of EPI programme managers emerged in the study, which shows ineffective communication that creates gaps in service provision disparities. A well-documented and implementation of support programme should be communicated depicting support visits and/or information giving visits.
- Effective monitoring and evaluation of the programme performance should be put in place.
- EPI awareness campaigns should be spread to all centres including worship centres as the strategy focuses on healthy children, school going and child bearing mothers, conducted in local languages, short but enough.

- Financial implicated aspects, of vaccine shortages, should be addresses by the policy makers to assist in achieving objectives of eradication of vaccine preventable diseases.
- The aspect of requesting vaccines from other facilities emerged during the study. This shows inequitable distribution of stocks, poor ordering strategies, unequal management approaches to stock control, inaccessibility of services that needs to be addressed by area managers at primary health care level.
- Employment of skilful people in ordering and monitoring sustainable vaccine supply to the facilities should be implemented at National, Provincial, district, local, and primary health care levels.
- Addition of material immunization capacity to the school health team to reduce absenteeism of learners who are due for immunization catch-up programme.

Theme 5: Description of strategies suggested overcoming challenges experienced during implementation of EPI

In support of the described strategies to improve EPI implementation, the researcher recommended the following:

- In curriculum development of the new R171 programme for the registered nurses, EPI should be included coupled with theory and practice integration to equip the professional nurses with appropriate skills in the implementation of immunization activities.
- Application of knowledge related to introduced programmes geared towards child survival strategies should be part of continuous learning through up-dates and workshops
- Effective community involvement and participation should be regularly practiced to forge in ownership of the health prevention and promotive strategies developed by the department of health.
- Collaboration of the different government departments in respect of financial support, transport, safe environment, social development must be established and sustained to pledge their political commitment together with the civil society achieving the child survival health outcomes.
- Private institutions should provide health in line with the department of health policies and protocols at a cost –effective manner to increase accessibility and

affordability of health services to the high-income and disadvantaged communities.

5.6 CONCLUSION

The objective of the study was to explore and describe the perceptions of R48 trained professional nurses on implementation of EPI. A qualitative approach was used to answer the research question. Issues arose that needed attention with regard to education related to EPI implementation. The key findings indicate importance of theory and practice integration during training.

Professionals highlighted support from programme managers on both EPI updates and workshops and control and availability of vaccines that should be sustained. They further emphasised implementation of effective monitoring and evaluation programmes that would identify early-anticipated childhood health problems. The development of sustainable strategies geared towards achieving positive health outcomes.

Communication is the important stronghold in EPI implementation. This aspect talks to EPI campaigns to communities and families to deal with issues of adherence to scheduled immunization visits and follow-up care. Regular individualised health education should form part of a platform to renew and emphasise correct immunization activities.

According to Van Rensburg (2012:167) gaps between policy intentions and policy implementation lead to sub-optimal achievement of health outcomes referring to national norms and standards, monitoring and evaluation system, lack of managerial accountability for service related targets, skills and capacity required for implementation at service delivery levels.

Based on the findings of the study, it can be concluded that the objectives of the study have been achieved. Measures to improve training and further up-date on EPI implementation may be put in place to improve service delivery and ensure child survival. The researcher made recommendations based on the research findings related to

different structures involved in the implementation of EPI. This report will be disseminated to the relevant bodies at all levels of care in order to improve and sustain positive child health practices. A research article will also be submitted for publication.

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