

**DEVELOPMENT AND IMPLEMENTATION OF A TRAINING PROGRAMME TO
IMPROVE IMPLEMENTATION OF THE NURSING PROCESS IN PUBLIC
HOSPITALS OF LIMPOPO PROVINCE, SOUTH AFRICA**

by

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THESIS

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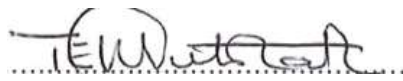
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DEDICATION

This thesis is dedicated to God Almighty, who gave me the wisdom and strength to complete this study. To my late father, Nkhumeleni Alfred Makhani for believing in me and encouraging me to continue studying. To my mother, Mmbudzeni Nyaluvhani Makhani for your endless prayers and motivation that I complete this thesis. A special dedication to my husband, Zwidofhelangani Nicholas Mutshatshi, my children Vhuhwavho Gift Conrad, Vhuthu Hope, and Vhulenda Junior for your unconditional love, being my pillar of strength and encouraging me to push on until my dream comes true.

DECLARATION

I, Takalani Edith Mutshatshi declare that "Development and implementation of a training programme to improve implementation of the nursing process in public hospitals of Limpopo Province, South Africa" hereby submitted to the University of Limpopo, for the degree Doctor of Philosophy in Health Sciences has not previously been submitted by me for a degree at this or any other university; that it is my work in design and in execution, and that all material contained herein has been duly acknowledged.



Takalani Edith Mutshatshi(Mrs.)

19.04.2021

Date

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ABSTRACT

The purpose of this study was to develop and implement a training programme to improve the implementation of the nursing process in public hospitals in the Limpopo Province, South Africa. A mixed-method convergent parallel design was used in this study. Qualitative data were collected from 18 professional nurses using a semi-structured one-to-one interview using an interview guide. The quantitative data were collected from 283 professional nurses through a self-administered questionnaire. Qualitative data were analysed using Tesch's open coding method while quantitative data were analysed using Statistical Package for Social Sciences (SPSS) version 24. The findings were merged using a joint display to determine the extent to which the two data confirm, contradict, or expand. The study was guided by Dickoff, James, and Wiedenbach's Practice Orientated theory and Knowles Adult learning theory.

The findings revealed that professional nurses perform their activities following the steps of the nursing process, nurses can implement the nursing process timeously but have problems with some steps of the nursing process. Nurses know the importance of recording but the incomplete recording was found to be a challenge, nurses were not attending in-service training on the nursing process leading to poor implementation of the steps, there were inadequate human and material resources, poor management and administrative support affecting the implementation of the nursing process, nurses do not know about the staff training and development policy and there is no training programme on the nursing process in the hospitals.

The study, therefore, recommends that the nursing management support for nurses implementing nursing process; provision of adequate human and material resources; scheduling of continuous in-service training sessions for all categories of nurses; adoption of the short training course developed by the Department of Health in the Limpopo Province for in-servicing professional nurses; nursing process be introduced from the first level of nursing training and be reinforced throughout training; the short course should be included in the curriculum of all undergraduate nurse training, and other researchers to develop a model for effective implementation of the nursing process.

Keywords: Nursing process, Implementation, Professional nurses, Public hospital, and Training programme.

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DEFINITION OF KEY CONCEPTS

- **Nursing process**

The nursing process is regarded as an orderly, systemic manner of identifying patients' problems, deriving plans to solve them, initiating the plans to implement, and evaluating the extent to which the plans are effective in resolving the identified problems (Kozier, Erb, Berman & Snyder, 2011). In this study, the nursing process refers to the process of assessing, formulating a nursing diagnosis, planning, implementing, evaluating, and recording the care that has been rendered to a patient.

- **Training programme**

The training programme is a formal or informal training design for personnel as part of a capacity-building plan for improving the professional competencies (knowledge, skills, values, and attitudes) based on their training needs in the nursing units (Coulson, Goldstone, Ntuli & Pillay, 2010). In this study, a training programme referred to a programme for improving the competencies of professional nurses in the implementation of the nursing process.

- **Implementation**

According to Ehemere (2006), implementation is the doing phase of the nursing process which incorporates nursing interventions or actions and the rationale for those interventions. Heidenthal (2003) in Mbombi (2012) defines implementation as the carrying out, accomplishment, or practice of a plan, a method, or any design for doing something. In this study, implementation refers to the performance of the professional nurse's responsibility and accountability, especially when caring for the patient in the various hospital wards.

- **Public hospital**

A public hospital is any hospital that is being funded and managed by the department of health where patients pay a specified amount of money to can access services (McGraw-Hill Concise Dictionary of Modern Medicine, 2006). In this study, a public hospital is any hospital that renders services that benefit all people of the country and is aided and funded by the government.

LIST OF ABBREVIATIONS

ADDIE	Analysis, Design, Development, Implementation and Evaluation
CEO	Chief Executive Officer
CHE	Council for Higher Education
CPD	Continuous Professional Development
LDoH	Limpopo Department of Health
NANDA	North American Nursing Diagnosis Association
NQF	National Qualification Framework
OPM	Operational Manager
RTHC	Road to Health Card
SABC	South Africa Broadcasting Commission
SANC	South African Nursing Council
SAQA	South African Qualification Authority
SLO	Specific Learning Outcome
TREC	Turfloop Research and Ethics Committee
WHO	World Health Organization

CHAPTER 1

OVERVIEW OF THE STUDY

1.1 INTRODUCTION AND BACKGROUND

The nursing process is a global concept which forms part of the backbone of the nursing profession, quality of health care, and safety of the patient (Gulanick & Myers, 2011). The effective implementation of the nursing process approach during clinical practice leads to improved quality nursing care, and the creation of theoretical, and scientific knowledge (Pokorski, Moraes, Chiarelli, Costanzi & Rabelo, 2009). The nursing process approach has been utilised in clinical practice worldwide to promote individualised patient care. However, research findings reveal that the nursing process is not being used effectively towards achieving quality patient care resulting in nursing care standards decline (Armstrong, Rispel, Penn-Kekana, Blaauw & Bell, 2012). According to Lutwama, Roos, and Dolamo (2012), nurses are the force of health care workers, who should implement public health interventions and their active role is important particularly if institutions are to work towards achieving quality health care.

According to Dieleman, Garretson, and van der Wilt (2009) and the World Health Organisation (2006), there is an increasing problem of poor performance amongst health workers, which leads to inappropriate health care service delivery, contributing to poor health care outcomes. The World Health Organisation (1996) recommends that the nursing profession should consider utilising the nursing process approach in the training of academic nursing, and the nursing practice as this approach will align with the professional role and development of the nursing profession at the par with other health professionals. The World Health Organisation also declared that between 2006 to 2015 is a decade of the high emphasis on the performance of human resources for health (Lutwama *et al*, 2012). Professional nurses who are the team leaders in patient care play an essential role in ensuring that quality patient care is achieved through the utilisation of the nursing process approach (WHO, 1996).

The nursing profession has developed over the years, from the period of disease model where patients were cared for based on the illness that they were suffering from. Thus,

to the current scientific approach in which emphasis is also placed on the psychological and social aspects which accompany physical illnesses and diseases (Afolayan, Baldwin, Onasoga & Babafemi, 2013). The evidence of poor performance has been identified by some researchers, but there is no adequate evidence on what exactly would be the most effective method to improve the performance of health care professionals (Chopra, Munro, Lavis, Vist & Bennett, 2008). The results of a study conducted in Nigeria publicised that when nurses show due care to their patients, the utilisation of the nursing process inpatient care was lacking in most healthcare facilities (Afolayan *et al*, 2013). A study conducted by Hagos, Alemseged, Balcha, Berhe, and Aregay (2014) in Ethiopia revealed that the overall discrepancy in the implementation of the nursing process amongst nurses is rated at 90%, while only 10% shows that the fair implementation of the nursing process. The findings of a study conducted by Momoh and Chukwu (2010) discovered that the use of the nursing process in most hospitals particularly in low and middle-income countries is lacking despite all the efforts by the nursing professionals to implement it.

The results of a study conducted by Fard, Haririan, Aghajanloo, Akbari, and Shirvani (2012) and Mamseri (2014) exposed concern of inadequate practice in the implementation of the nursing process in hospitals. This has an adverse impact on the care that is rendered to the patients. The study further exposes that the challenges associated with the implementation of the nursing process are the main reason leading to the nursing professionals to avoid using the approach in their daily patient care routines. In some instances where the nursing process is implemented inadequately, it is merely done as the accomplishment of institutional activity. The generalised attentiveness of how vital the process is for the nurses' development as health professionals with public responsibilities is seldom addressed (Mahmoud & Bayoumy, 2014).

The study conducted by Queiroz, Sant'Ana, Oliveira, Moinhos, and Santos, (2012), demonstrated a lack of proper practices when formulating the nursing diagnosis, and planning. Thus, in-service training on the implementation of the nursing process of high value is unsatisfactory. According to Hasson and Arnetz (2009) in Mamseri (2014), the study conducted in Tanzania divulges that correct education of the application of the

nursing process helps in developing nursing science, also increasing the nurses' participation on the promotion of quality patient care.

In a study conducted by Maharaj (2015) at Umgungundlovu district of KwaZulu- Natal in South Africa, the study discovered that professional nurses experience challenges during the implementation of the nursing process. The study further showed that nursing process implementation is not fully understood by professional nurses in public hospitals. There are conspicuous gaps in the framework that forms their professional guide. However, nurses were not familiar with the implementation, and evaluation of the phases of the nursing process. Thus, the study concluded that there is a need for nurse leaders to continuously support the use of the nursing process by implementing teaching, and in-service training programmes.

The Provincial Department of Health in the Limpopo Province has introduced the system whereby quarterly the colleagues review one another within the public hospitals. This was executed to improve patient care, but the results continuously exposed challenges as far as the implementation of the nursing process is concerned (LDoH, Vhembe District Peer Review Report, 2012/2013).

1.2 PROBLEM STATEMENT

Professional nurses who are caring for patients at public hospitals in the Limpopo Province are facing challenges, regarding the implementation of the nursing process. There is poor implementation of the nursing process, and incomplete recording of nursing interventions done on the patients in most public hospitals. These inadequate practices by professional nurses indicate that there is a need for routine in-service training and orientation programme to improve the implementation of the nursing process (Mutshatshi, Mamogobo & Mothiba, 2015). A study conducted by Agunwah (2010) found that inadequate practices by professional nurses during patient care negatively affect the implementation of the nursing process in public hospitals. The results of a study conducted by Agyeman-Yeboah, Korsah, and Okrah (2017) revealed that other factors were found to be interfering with the effective implementation of the nursing process in

public hospitals. Nevertheless, in this study, the researcher focuses on the inadequate practices of professional nurses when implementing the nursing process.

The South African Nursing Council (SANC) in its Scope of Practice (Regulation 2598 of 1995) states that the professional nurse has to ensure that the patient admitted to the ward has the correct factual information taken to allow for the proper, and accurate formulation of nursing diagnosis. SANC's analysis report from the period 2003 to 2008 revealed that 769 nurses were found guilty of cases of professional misconduct. Furthermore, out of the 587 were professional nurses who were charged for poor nursing care where they failed to make a proper nursing diagnosis. Subsequently, they made mistakes during the implementation phase as well as poor communication during patient care (Van Graan, Williams & Koen, 2016). According to the SANC statistical report (2016), cases of misconduct in South African health care institutions for the period March to October reached a total of 12 cases, where eight cases of poor nursing care were committed by professional nurses who are inadequately implementing the nursing process in their daily care of patients.

Currently, in Limpopo Province, there is no specific training programme in place to in-service and update professional nurses on the implementation of the nursing process at the public hospitals. It was against this background that this study seeks to develop and implement a training programme to improve the implementation of the nursing process in public hospitals in the Limpopo Province, South Africa.

1.3 PURPOSE OF THE STUDY

The purpose of the study is to develop and implement a training programme to improve the implementation of the nursing process in the public hospitals of the Limpopo Province, South Africa.

1.4 OBJECTIVES OF THE STUDY

The following are the objectives of this study: -

- To explore and describe the practices of professional nurses when implementing the nursing process in public hospitals of the Limpopo Province, South Africa.

- To assess the training needs of professional nurses when implementing the nursing process in public hospitals of the Limpopo Province, South Africa.
- To describe a conceptual framework for the development, and implementation of a training programme, for professional nurses implementing the nursing process in public hospitals of Limpopo Province, South Africa.
- To develop a training programme with guidelines for professional nurses who are implementing the nursing process in the public hospitals of the Limpopo Province, South Africa.
- To implement the training programme for professional nurses regarding the implementation of the nursing process in public hospitals of the Limpopo Province, South Africa.

1.5 RESEARCH QUESTIONS

The research questions that guide the researcher throughout this study are:

- How are professional nurses implementing the nursing process during patient care?
- What are the training needs of professional nurses regarding the implementation of the nursing process in public hospitals of Limpopo Province, South Africa?
- How can development and implementation of a training programme improve implementation of the nursing process in public hospitals of Limpopo province, South Africa?

1.6 THEORETICAL FRAMEWORK

According to Polit and Beck (2008), a theory is the important aim of science, because it exceeds the specifics of a particular time, place, and group of people in the relationships among variables. Theories and conceptual models are the main tools used by researchers to consolidate findings into a wider conceptual context (Polit & Beck, 2008). Hence, in this study, Dickoff, James, and Wiedenbach's (1968) practice-orientated theory and Knowles adult learning theory are used to conceptualise the findings (Kearsley, 2010).

1.6.1 The Practice-Orientated theory

The components that Dickoff *et al*, (1968) used in the situation-producing theory guides the framework of the study and focuses on the following six questions:

- a) Who or what performs the activity?
- b) Who or what is the recipient of the activity?
- c) In what context is the activity performed?
- d) What is the guiding procedure, technique, or protocol of the activity?
- e) What is the energy source for the activity whether chemical, physical, and mechanical?
- f) What is the endpoint of the activity?

The researcher has conceptualised a framework for professional nurses who are the agents to develop and implement a training programme. The training programme is aimed at developing a competent professional nurse, who can effectively implement the nursing process during patient care. The six vital points to survey which correspond with the six questions about an activity are as follows:

1.6.1.1 The agency

The aspect of agency corresponds with the question of “who or what performs the activity”? The agent in this study is the researcher with scientific knowledge, skills to accomplish the activity of developing a training programme, which aims at producing competent professional nurse practitioners. The external resources of the agent are those resources not that of the agent, which are available for the maintenance, support, development, protection, power, or flexibility of the agent.

1.6.1.2 The recipients

The aspect of recipiency corresponds with the question of who or what is the recipient of the activity. The recipient is not merely a passive participant, because there is a reaction between the agent and the recipient of the activity (Dickoff *et al*,1968). In this study, the recipients of the activity are the professional nurses, who need to be empowered through a training programme to render quality patient care in the wards through the nursing process approach.

1.6.1.3 The context

The aspect of the framework corresponds with the question asking in “what context is the activity performed”? The activity is ought to be viewed to discover the relations to other things, which include persons, and other activities. The framework as the context of the activity does not only focus on physical aspects, such as time, and space. However, it focuses on both physical, and non-physical factors. The framework is the context where the activity is performed. In this study, the context of the training programme is public hospitals of the Limpopo Province, South Africa.

1.6.1.4 The procedure

The procedure corresponds with the question “What is are the guiding processes, technique or protocol” of the nursing process. Dickoff *et al.*, (1968) indicate that when a nursing activity is performed from aspects of the procedure, it means that the activity is adhering to principle, rule, routine or protocol governing the activity. The procedure is essential to provide more information to allow the activity to be carried out and it can be useful to defend the agent, the recipient, and the organisation. The training programme should include guidelines to be followed when implementing the programme.

1.6.1.5 The dynamics

The dynamics correspond with the question “what is the energy source for the activity”? This is the power source needed for the execution of the activity, which is in this instance, come from the agent and the recipients. The explanation of the dynamics which are the important qualities of the agent and recipients in the specific context enable the effective implementation of the programme.

1.6.1.6 The terminus

This refers to the end-point of the activity. When an activity is considered from the viewpoint of the terminus, this is to look at the activity from the point of what is accomplished by the activity. The terminus corresponds with the question of “what is the end product of the activity? The end-point in this training programme is a competent professional nurse who can effectively practice the implementation of the nursing process in patient care in public hospitals of Limpopo Province, South Africa. The following

schematic diagram figure 1.1 represent the Practice-orientated theory adopted from Dickoff et al.,(1968).

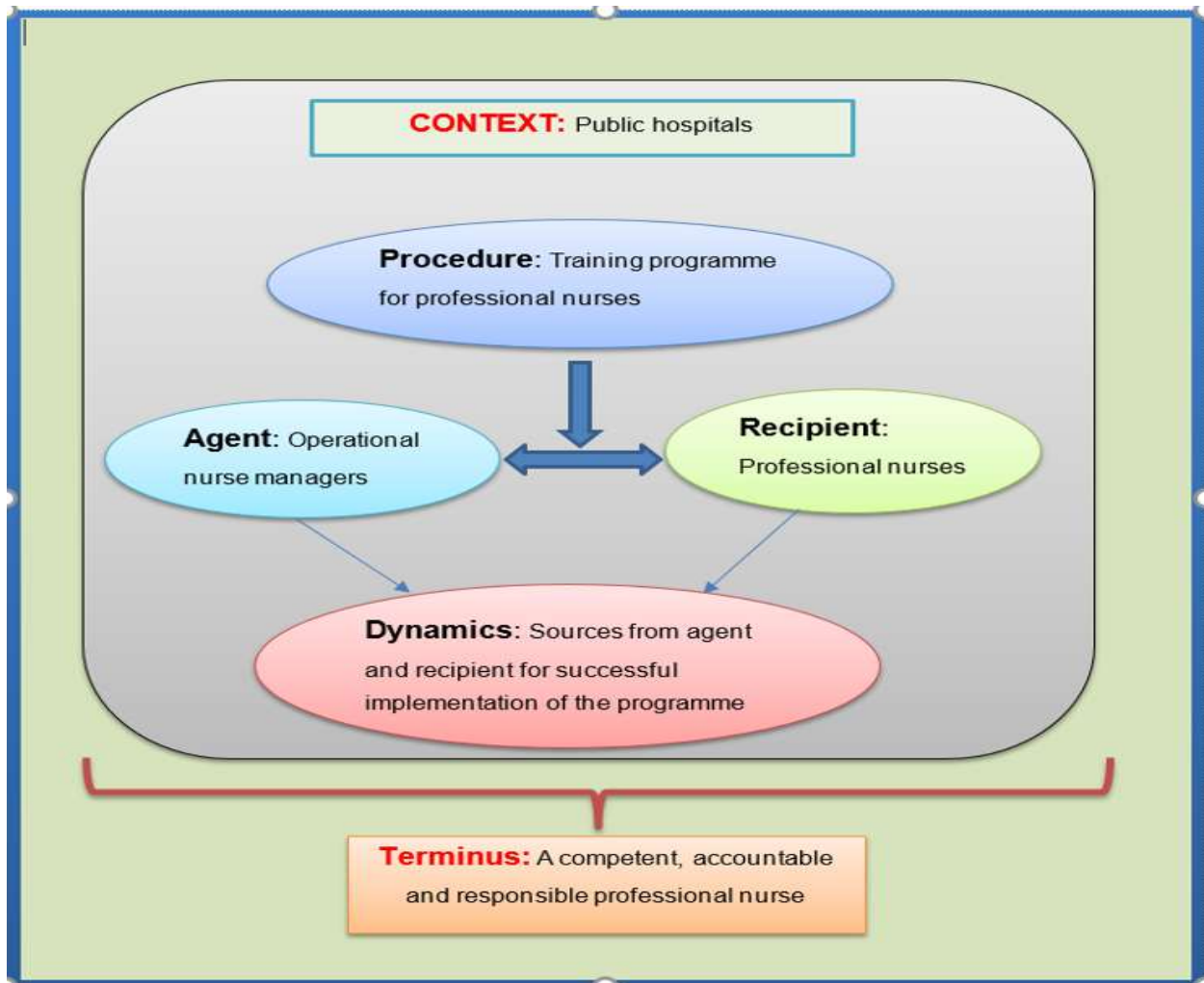


Figure 1.1: Schematic representation of Practice-orientated theory adopted from Dickoff et al., (1968)

1.6.2 Malcolm Knowles' Adult Learning Theory

Andragogy is the art and science of adult learning (Pappas, 2014). Thus, andragogy refers to any form of adult learning (Pappas, 2014). Since the professional nurses who are implementing the nursing process are adults, the Adult Learning Theory of Malcolm Knowles was relevant in this study. The basic characteristics of adulthood learning, according to Knowles (1984) in Kearsley, (2010), includes the following:

- *Self-directedness*

Adult learners are more receptive to learning if the aspects of training are relevant to the tasks they performed in their working environment. When adults apprehend that the activities they are engaged in, directly contribute to achieving their learning objectives. They are inspired and motivated to engage in those activities to also efficiently complete them. The researcher as a facilitator during the implementation of the training programme will guide and direct the professional nurses to identify the value for attending the training.

- *Orientation to learning*

According to Pappas (2014); Klopper (2011), being problem-orientated implies that when a person matures, the time perspective also changes from postponing the application of knowledge to immediacy in the application of knowledge. Professional nurses as adult learners will change their perspective from one of postponed application of knowledge to immediacy of application, and therefore the orientation toward learning shifts from one of subject-centeredness to one of problem centeredness.

- *Motivation to learn*

According to Knowles (1984), in Kearsley, (2010) adults have confidence that internal motivation is not natural, but a conditioned internal motivation to learn. The motivation to learn increases when the lesson is clear and relevant to real-life situations. According to Pappas (2014), adult learners are internally motivated. This study focuses on professional nurses who need learning activities that will prove how the proposed learning will benefit them during the care of their patients.

- *Adult learner experience*

Life experience also plays a major role in learning because it allows people to work harder to develop themselves. Professional nurses have gained a lot of experience in implementing the nursing process in patient care, therefore, the training programme should focus on their unique training needs and be actively involved.

- *Readiness to learn*

During the process of learning, aspects related to “teachable” moments are important to an adult learner Knowles (1980) in Kearsley, (2010). In adult learning, learning is done to

accomplish a particular task and is well organised based on readiness to learn on the part of the adult learner. Professional nurses as adult learners will be ready to engage themselves with new learning experiences. Thus, that provide a sense of social development benefit, making them ready for new challenges in the learning process. The following diagram figure 1.2 represent characteristics of Knowles adult learning theory.

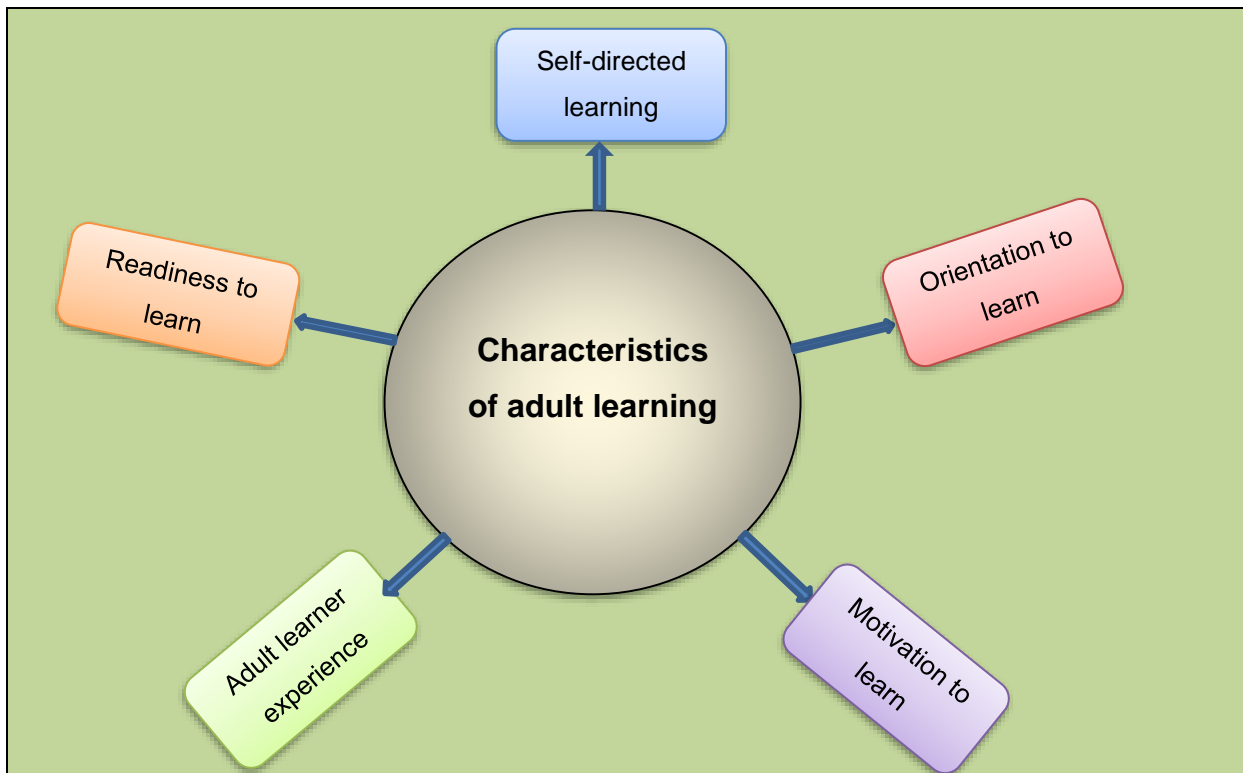


Figure 1.2: Schematic representation of characteristics of adult learning theory adopted from Kearsley (2010).

1.7 PARADIGMATIC PERSPECTIVE

A paradigm is explained as an ideal framework for observation, and understanding that it gives shape to the philosophy, and thinking through what people perceive, and how they understand it (Polit & Beck, 2012). Paradigmatic opinions are theories about the knowledge, how it is created and shared by members of a particular society or community (Creamer, 2018). A research paradigm in research assists the researcher with more understanding and determination of the most relevant approach to be used to undertake

the research. Thus, it also enables the researcher to access more information and answers that are related to the research question (Bilau, Witt & Lill, 2018). This study is grounded in pragmatism, dialectical pluralism, positivistic, and interpretivistic approaches which are compatible with mixed-method research.

1.7.1 Pragmatism

In the pragmatism approach, the research is outcome-based and interested in producing the meaning of things, that will be both practical and useful. Hence, the emphasis is put on communication and making meaning to bring about practical solutions to social problems. From a pragmatic viewpoint, the research question is taken primarily as an important aspect (Creamer, 2018; Shannon-Baker, 2017). In this study, pragmatism was used to enable the researcher to highlight the shared meaning of the influence of the professional belief on the effective implementation of the nursing process in patient care, produced through the merging of the qualitative and quantitative research findings.

1.7.2 Dialectical Pluralism

Dialectical pluralism is one paradigm that is a relevant fit to the overall mixed methods and aligns with one of the main rationales for undertaking research using a mixed-methods approach (Creamer, 2018). The paradigm emphasises consensus convergence and stresses the importance of knowledge, also the understanding achieved when people are thinking dialectically. Through a dialectic viewpoint, two or more paradigms can be brought together in a dialogue in the research process. In this study, the simultaneous collection and analysis of data followed by the merging of results promote a dialogue between qualitative and quantitative results (Creswell *et al*, 2014).

1.7.3 Positivism

This approach focuses more on the value of objectivity, where the researcher in an independent and neutral viewpoint, approaches the respondents with positivism. The paradigm views cause considers the relationships as significant also testing the hypothesis or the theory (Polit & Beck, 2012). In this study, a quantitative questionnaire was expended to collect data on the practices of nurses, implementing the nursing process also an assessment of their training needs on the nursing process.

1.7.4 Interpretivism

The interpretivism approach is subjective and focuses on the careful collection and analysis of subjective data which is presented in a narrative form (Polit & Beck, 2012). In this research, the interpretivism approach was chosen because the participants are part of describing the meaning of concepts associated with their experiences, in the regional hospitals of the Limpopo Province. The information obtained was taken as credible because it was collected from experienced nurses who are implementing the nursing process in patient care. Therefore, one on one semi-structured interviews were consumed to describe the practices that nurses were doing when implementing the nursing process in patient care. Most significantly this study comprises the following assumptions, ontological, epistemological, methodological, and axiological phenomenon.

- *Ontological*

Ontology is regarded as the context-specific knowledge, on the real world where research is undertaken, and the interpretation of the truthfulness as understood by the participants (Polit & Beck, 2012; Creamer, 2018). The assumption was used in this study to determine nursing process implementation based on their experiences, in their work context. In the qualitative research approach, the researcher interacted with the nurses to audio record the interviews, and take field notes, to also capture non-verbal cues and emotions.

- *Epistemological*

The objective of each research is to uphold human rights and social fairness through adherence to ethical standards. This includes the avoidance of harm, informed consent, confidentiality, privacy, fairness, and anonymity (Creamer, 2018). This study complied with the ethical requirements by following the University of Limpopo protocol and all aspects followed in research including ethical clearance and permission.

- *Methodological*

Both constructivism and the positivism approach were employed in the study. A mixed methodology concurrent design was utilised where both quantitative and qualitative data collection and analysis were completed at the same time with the merging results. The

research methodology formed the plan that explained the approaches used. The theoretical framework also underpins the development of the training programme.

- *Axiological*

The axiological assumption was aimed at linking research to practice and was action-focused. The main aim of the study was to develop and implement a training programme to improve the implementation of the nursing process which in this case is practice-orientated.

1.8 OVERVIEW OF THE RESEARCH METHODOLOGY

This study applied a mixed methodology. Thus, the convergent parallel design also forms part of this study. It is a design whereby both quantitative and qualitative research methods are pragmatically used in an identical period or a series of studies (Creswell, Plano-Clark & Garrett, 2008). Both the quantitative and qualitative strands are used at the same time to bring forth solutions to the research problem, and research questions (Creswell, 2009). The two strands are merged during the interpretation of findings to interpret the results attempting to check the extent to which the two sets of results converge, diverge, and relate to each other (Creswell & Plano Clark, 2011).

This academic purpose of this research was to develop and implement a training programme to improve the implementation of the nursing process in public hospitals of the Limpopo Province, South Africa. The application of mixed-method research convergent parallel approach is apt for this study. Additionally, the advantage of using both approaches in one study is that they can complement each other. Ideally, mixed-method research would allow more vigorous analysis taking into consideration the strengths and weaknesses of each approach (Creswell *et al*, 2011).

The participating general units of regional public hospitals in Limpopo Province were selected because they admit several patients with complicated conditions, some transferred from other district hospitals. The research setting comprised of all the medical, surgical, and paediatric wards of the five regional hospitals in Limpopo Province, South Africa. The target population of this research was all professional nurses working in the general wards. The accessible population of those professional nurses implementing the

nursing process in the general wards of tertiary, and regional hospitals of Limpopo Province. The population for this study was 973 professional nurses.

A non-probability and purposive homogenous and criterion sampling were used to select 18 participants for the qualitative strand. The qualitative data were collected using one-on-one interview. The researcher used the interview guide to collect data from professional nurses in the general wards, of the public regional hospitals until data saturation was accomplished. Qualitative data were analysed using Tesch's open coding method where themes and sub-themes were developed (Polit & Beck, 2012). The primary aim of qualitative inquiry was to get a clear understanding of the nursing process implementation by nurses in public hospitals in the Limpopo Province, South Africa in its natural context without imposing any control or manipulation (Polit & Beck, 2012).

The probability of systemic sampling was expended to obtain a sample for the quantitative strand of the study, where 283 participants were selected. Quantitative data were collected using the self-developed questionnaires. Consequently, to get numerical data from professional nurses concerning practices, and training assessment in the implementation of the nursing process in the regional public hospitals of Limpopo Province, South Africa. Despite, the quantitative data were analysed using Statistical Package for Social Sciences (SPSS) version 24 with the assistance of a statistician. Descriptive and inferential statistics are consumed to describe and analyse the raw data collected quantitatively through questionnaires. The analysed data were then organised, summarised, and presented through frequency distribution tables, percentages, and graphs.

This research followed a mixed-method convergent parallel design. This design comprises of exploring, and describing the practices of professional nurses when implementing the nursing process in specific general nursing practice. It also assesses the training needs of professional nurses concerning the nursing process through a mixed methodology. In this study, the practices of professional nurses in general nursing practice in the implementation of the nursing process were studied in-depth. This study also embarked on the legal, ethical, and contextual framework of the South African

nursing profession. The measures to ensure trustworthiness were ensured in the qualitative strand while issues of validity, and reliability were confirmed in the quantitative strand.

When the two sets of results were available, then the researcher came to a point of merging the results of the two approaches i.e. qualitative and quantitative strands to compare the two results. The researcher then interpreted the results, checking the extent to which the two sets of results converged, diverged, and relate to each other. A comprehensive discussion of the research methodology and the design are outlined in Chapter three of this thesis.

1.9 PHASES OF THE STUDY

This study was conducted in phases: - namely phase one: situational analysis and this phase deal with the first and second objective of the study where a mixed-method convergent parallel design is employed to fulfill these objectives; phase two: description of the theoretical framework and this phase addresses the third objective of the research; phase three: development of a training programme with guidelines to address objective four. Phase four consists of the implementation of the training programme to address objective five. Phase one is discussed comprehensively in chapter three and four respectively; phase two is discussed in detail in Chapter five, whereas phase three is discussed in Chapter six, and phase four in Chapter seven of this study. The following diagram figure 1.3 represent the phases of the study.

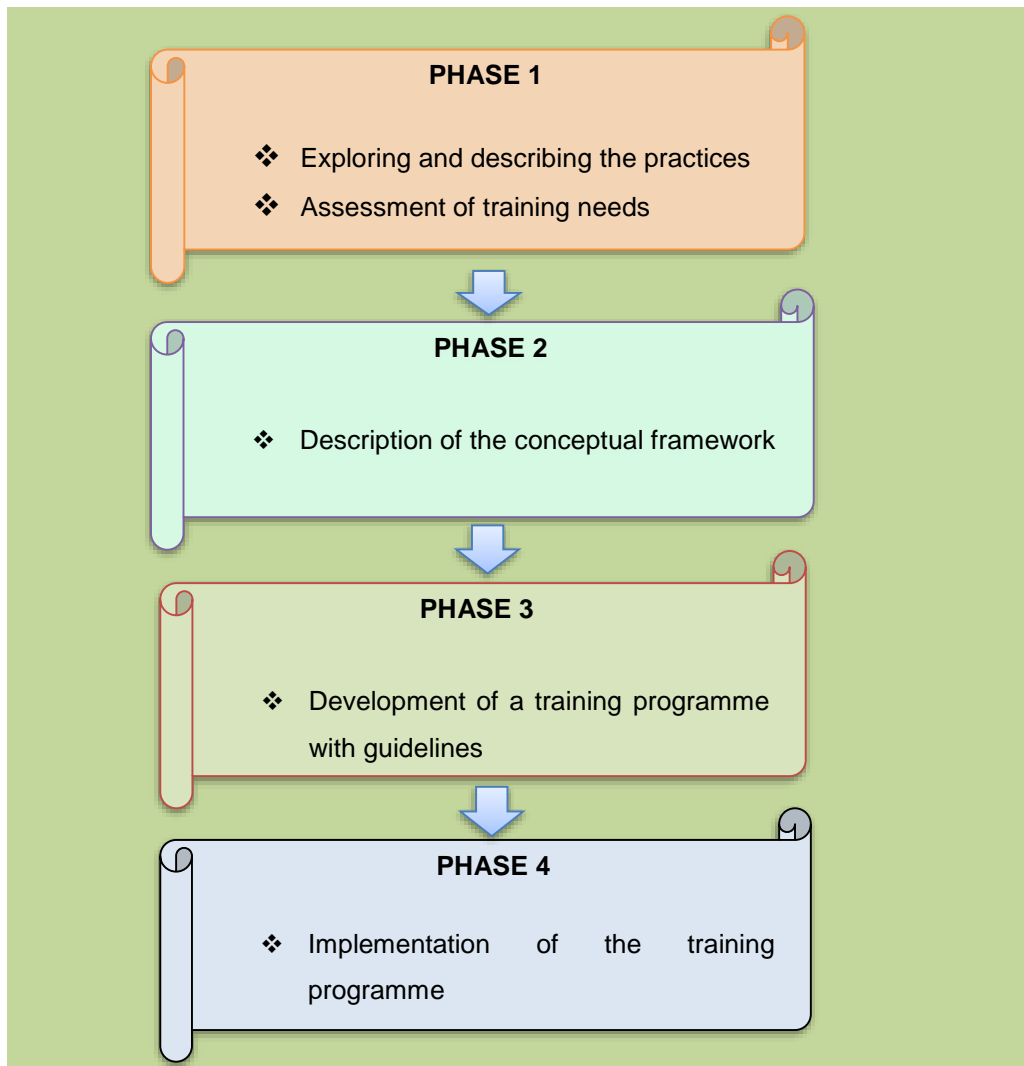


Figure 1.3: Schematic representation of phases of the study

1.10 SIGNIFICANCE OF THE STUDY

This study is important to empower nursing professionals, and managers with knowledge, skills, and attitudes to improve quality health care delivery using the nursing process approach in meeting the aspirations of the patients. The findings of this study are ought to benefit the following:

- *Nursing care and administration*

The findings of this study provide a chance for professional nurses to recognise gaps, especially in areas of implementation of the nursing process. The results would be useful to health planners, and policymakers by contributing towards the formulation of guidelines

for improving the implementation of the nursing process in public hospitals. The findings would contribute to the improvement of patient care in public hospitals.

- *Research*

The findings of this study provide a baseline for further research either to confirm or contradict the findings of this study. The findings can also prompt another researcher to explore the implementation of the nursing process further.

- *Nursing education*

The researcher considers the findings to be adding to the existing body of knowledge, and understanding the subject of implementation of the nursing process in the nurse training institutions.

1.11 DIVISION OF CHAPTERS

Chapter 1: Introduction and overview of the study

Chapter 2: Literature review

Chapter 3: Research methodology

Chapter 4: Discussion of findings and literature control

Chapter 5: Theoretical framework for the development of a training programme

Chapter 6: Development of a training programme with guidelines for professional nurses

Chapter 7: Implementation of the training programme, conclusions, limitations and recommendations of the study

1.12 CONCLUSION

Chapter one outlines the overview of the study which consists of the introduction; background; research problem; the conceptual framework; the aim of the study; research questions; objectives, a brief description of the methodology for the development and implementation of a training programme were also discussed. The context of the study which is the public hospitals in the Limpopo Province was explained. The ethical principles were adhered to throughout the study. The researcher indicated a pool of knowledge on the background of the problem concerning the implementation of the

nursing process as a nurse educator who was previously a professional nurse in public hospitals in the Limpopo Province.

The programme that is to be developed following this study would contribute to addressing the practices of professional nurses in implementing the nursing process. The researcher opted to use a mixed-method approach, where the theoretical assumptions of Dickhoff's Practice Orientated Theory, and Knowles Adult Learning Theory, the two theories are discussed in-depth later in the study. The data collection, analysis, and methodology were designated for the logical flow while addressing the objectives of the study. The significance of the study was also explained.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

The previous chapter served as an overview of the study. This chapter presents the literature review. According to De Vos, Strydom, Fouché, and Delport (2011), a literature review identifies the literature that is relevant to the research topic, therefore, it discloses the relationship between the literature and the study. However, Coughlan, Cronin, and Ryan (2013) explain that literature review is the selection of both published or unpublished documents that contain information, ideas, and evidence on a particular topic. It is also an effective evaluation of those documents concerning the research being proposed. Thus, in this chapter, the researcher discusses the following phenomenon: the methodology, the data sources, the search terms, the literature parameters, the search findings, the themes derived from the literature, and the conclusion and recommendations of the findings are described extensively.

2.2 LITERATURE REVIEW METHODOLOGY

The narrative literature review methodology was adopted in which the basic standard of having a clearly outlined method on how it was used are indicated. Subsequently, the review was undertaken methodically following a systematic review process. The narrative literature methodology was appropriate to identify, assess, analyse, and interpret the body of knowledge on the implementation of the nursing process in patient care. The methodology was also chosen to minimise the bias that it will place and rationalise the selection of the topic within the context of existing literature, while identifying the gaps in existing knowledge (Coughlan *et al*, 2013). The narrative type of literature review enabled the reviewer to search literature broadly. The reviewer, therefore, outlines the parameters that are in place when a literature search was done, such as demarcating the databases, key search terms, and how they were combined, time limits, and language limitations. The reviewer outlines the findings in terms of volume and type of literature, thematic analysis, and synthesis that led to the final selection of the literature.

2.2.1 The aim and objectives of the literature review

The literature review in this study is aimed at answering questions concerning the existing knowledge on the implementation of the nursing process. The issues that have been addressed to date, outlining major debates on the topics while identifying the gaps in literature leading to the development and implementation of the training programme to improve the implementation of the nursing process in public hospitals (Moule & Goodman, 2014). The literature review answers the following questions:

- a) What is the nursing process?
- b) What are the steps of the nursing process?
- c) What are the benefits of implementing the nursing process?
- d) How are nurses implementing steps of the nursing process in patient care?
- e) What are the factors that influence the implementation of the nursing process?
- f) What are the strategies to improve the implementation of the nursing process?

2.2.2 Identifying Sources of literature

The sources of literature in this study included electronic databases for professional journals such as Google Scholar, Science direct, EBSCOhost, PUBMED. Additionally, some of the sources were hand searches which include the reference lists from retrieved literature. Grey literature was used as another source where unpublished masters and Ph.D. theses and data from conferences. Another source of information was from textbooks to obtain background on the topic and for initial reading.

2.2.3 Selecting search terms

The relevant literature was selected using various key search words individually and in combination. Boolean operators were used to combine keywords to select and or exclude the articles. The commonly used Boolean operators are OR, AND, and NOT (Coughlan *et al*, 2013).

2.2.3.1 Key search words

The individual search words include: "Nursing process", "steps of nursing process", "nursing process implementation", "nursing process utilisation". Keywords search using Boolean operators included "nursing care AND nursing process", "nursing process AND

implementation”, “nursing process” AND “in-service training”, “nursing process implementation” AND “nursing process use” NOT “caring”, “nursing process implementation” OR “nursing process utilisation”, “nursing process implementation” OR “nursing process application, “implementation of nursing process” OR “utilisation of nursing process”, “nursing process execution” OR “nursing process implementation”.

2.2.3. 2 Inclusion and exclusion criteria

The selection was limited to sources that are published during the last 10 years (January 2008-December 2018), both quantitative, qualitative, and mixed-method research articles were included. Only sources published in English, focusing on the implementation, and training on the nursing process in patient care studies were be included. All studies not reported in English, more than 10 years old, and not focusing on the implementation and training of the nursing process were excluded. The following diagram figure 2.1 represent the literature review process adopted from Polit and Beck (2012).

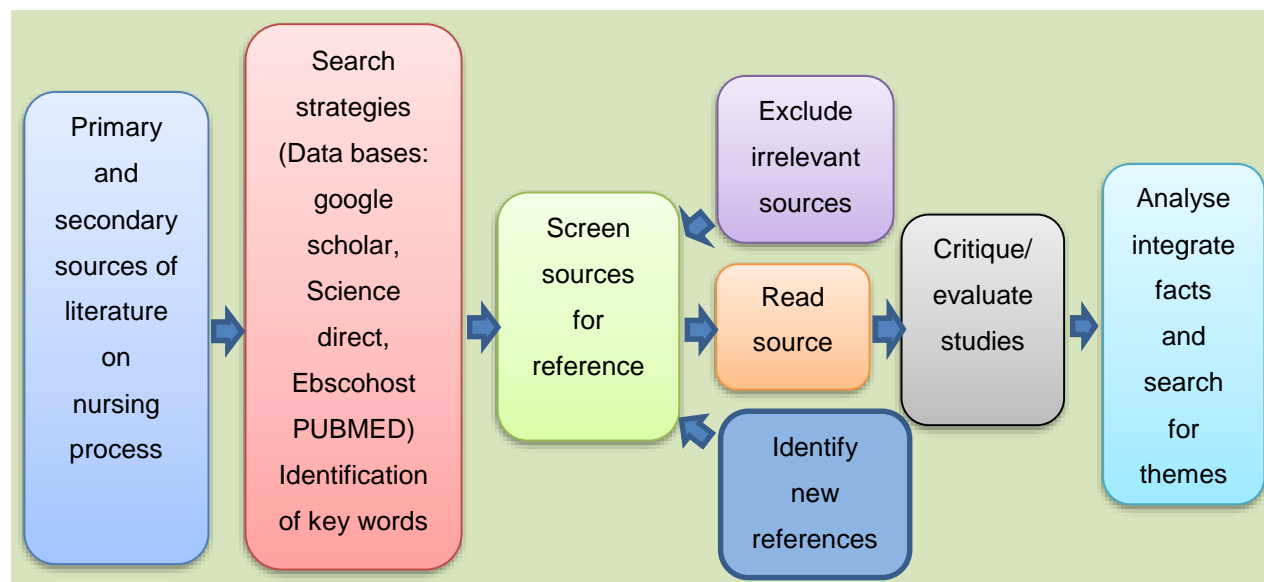


Figure 2.1: The Literature review process adopted from Polit and Beck (2012).

2.2.4 Findings of the literature search

The findings of the literature search are summarised as follows:

The literature search had a total of 66 studies, both quantitative and qualitative, and five books were reviewed in the literature review. The studies that did not meet the inclusion

criteria were eliminated. Nonetheless, only the studies that convene the pre-determined inclusion criteria were included in the literature review of this study.

2.2.5 The themes identified

Themes that were identified from the literature include:

The historical background, description of the concept “nursing process”; and the

Steps of the nursing process;

Benefits of implementing the nursing process in patient care;

Nursing process implementation in patient care viewed from various contexts;

Factors influencing the implementation of the nursing process in patient care; and

strategies to improve the implementation of the nursing process.

2.3 HISTORICAL BACKGROUND AND EXPLANATION OF THE CONCEPT “NURSING PROCESS”

The utilisation of the nursing process has spread rapidly across the globe since its inception in the early 1950s. Hall was the first to see nursing as a process. In 1960 Ida Jean Orlando defined the phases of the nursing process in terms of interpersonal relationships, while other nurses were exploring its philosophy and values (Kozier, Erb, Berman & Snyder, 2011). However, the first identified steps of the nursing process were recorded in 1967 as assessment, planning, implementation, and evaluation while the term nursing diagnosis was first used in 1974 after the first meeting of the group called North American Nursing Diagnosis Association (NANDA). Thereafter, in 1986 the nursing diagnosis was added to the previously existing four steps of the nursing process. The nursing process is currently regarded as a framework within which the nurse should function, as set out by the South African Nursing Council Rules and Regulation on the Scope of Practice of professional nurses (SANC, 2005; Regulation 2598).

The concept “nursing process” refers to a systemic, patient-centered, and a scientific method of problem-solving for structuring the nursing care to achieve the maximum level of change towards expected outcomes in providing nursing care (Kozier *et al*, 2011). Furthermore, Alfaro-LeFevre (2010) postulates that the scientific nursing process is a

systematic and rational method of planning which provides individualised care to patients, families, groups, and communities.

Other authors such as Dal Sasso, Barra, Paese, de Almeida, Rios, Marinho, and Debétio (2013) view the nursing process as a mechanism of care that guides the order of clinical reasoning and improves the quality of care given to patients. The nursing process further integrates, organises, and ensures that the continuity of information is adhered to, allowing nursing staff to evaluate their efficiency, effectiveness also to adjust their performance according to patient recovery results (Dal Sasso *et al*, 2013).

2.4 STEPS OF THE NURSING PROCESS

The nursing process is composed of five interrelated sequential steps starting with a subjective and objective nursing assessment of the patient's needs. Then integrating the information to form a nursing diagnosis. Developing a nursing care plan to address the identified needs. Implementing the appropriate nursing interventions or actions, and finally evaluating the patient outcome as a result of the nursing intervention carried out (Sithole, 2011). Furthermore, Sithole (2011) alluded that the cyclic and dynamic nature of the nursing process steps assist nurses to systematically provide quality care to patients. Moreover, enhance critical thinking since they include working to and from within these steps and they are interrelated, interdependent and interconnected to each other. Berman, Snyder, and Frandsen (2015) indicate the steps of the nursing process in detail below:

2.4.1 Assessment

Assessment is the initial step of the nursing process, which is an on-going collection process. It includes the organisation, validation, and documentation of data collected from patients. This step moreover includes both subjective and objective data upon which the subsequent steps of the nursing process depend on. The intellectual judgment of the nurse depends on complete and accurate data collection from the patients, to ensure effective analysis of the collected information. Methods used for data collection include subjectivity, where data that are provided by the patient, and significant others is an objective method of data collection. Therefore, the nurses utilise assessment techniques

such as inspection, palpation, percussion, and auscultation to physically examine the patient's (Berman *et al*, 2015).

2.4.2 Nursing diagnosis

The nursing diagnosis is a statement of the patient's problems that requires nursing interventions, to ensure that the patient's needs are met (Geyer, Mogotlane & Young, 2009). The nursing diagnosis is the nurse's clinical judgment about the client's response to actual or potential health conditions or needs. Furthermore, nursing diagnosis includes the evaluation of subjective and objective data. It provides a statement of the problem and a description of related or supportive factors that describe causative factors. The nursing diagnosis can relate to an actual problem existing at the time of assessment or a potential problem that could arise in the future (Berman *et al*, 2015).

- *Actual Problems*

These are health problems that are present at the time of an assessment to change the actual problem into a nursing diagnosis. The nurse should organise, analyse, synthesise, and summarise the assessment information. The nursing diagnosis is comprised of three elements, in the patient's health problem, it is the characteristic and cause, or aetiology (Berman *et al*, 2015).

- *Potential Problems*

A potential problem does not exist at the time of assessment, but the patient has risk factors that if not attended to they are likely to lead to the development of a problem unless the nurse plans interventions to prevent it (Berman *et al*, 2015). This is the phase in the nursing process which shows that the nurse reviewed the appropriate subjective and objective data available leading to a professional determination of the clinical problem. Once the nurse makes a clinical nursing diagnosis based on a thorough assessment, the rest of the process continues to progress smoothly. As a result, correct formulations of nursing diagnoses provide the basis for selecting the nursing interventions that will achieve the desired patient outcomes. The following diagram rfigure 2.2 represent the formulation of a nursing diagnosis adapted from Taylor, Lillis & Lynn, (2014).

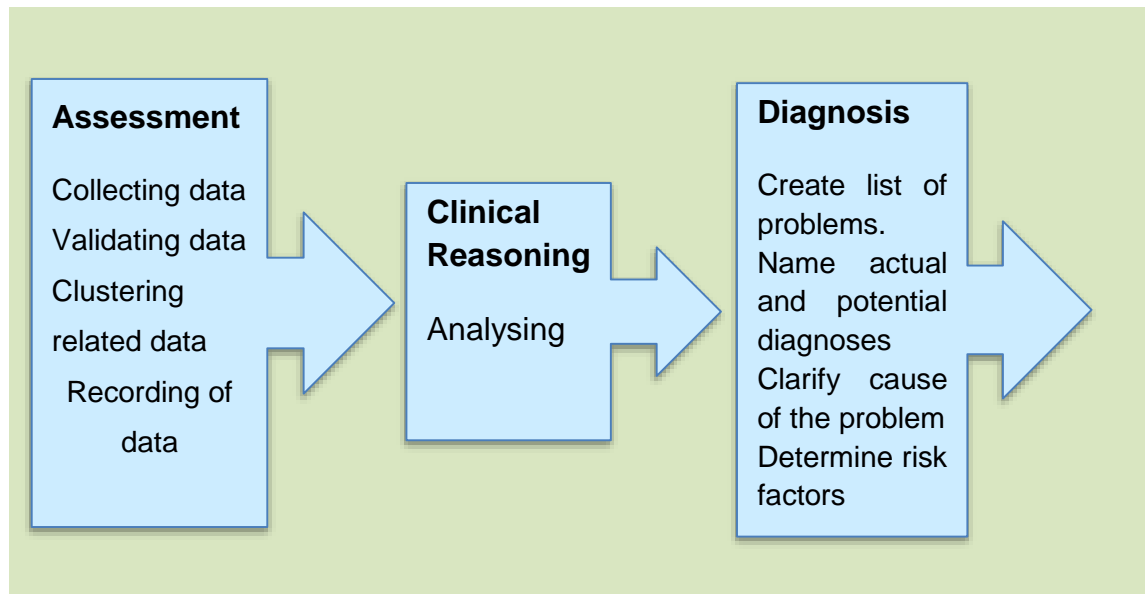


Figure 2.2: Schematic representation of formulation of a nursing diagnosis adapted from Taylor, Lillis & Lynn, (2014).

2.4.3 Planning

According to Berman *et al*, (2015), in the planning step, the nurse assigns priorities to the nursing diagnosis. Therefore, the highest priorities are assigned to problems that are urgent and critical such as the airway. Thus, in specifying the objectives or desired outcomes, selecting nursing actions, and drawing up of a nursing care plan is essential in this stage. This involves determining what could be done to assist a patient with meeting his or her health care needs, to decide on the appropriate nursing actions that will support the achievement of those needs. Furthermore, in the planning stage, the nurse uses data from the assessment step and the nursing diagnosis as guidance in determining the relevant, and appropriate nursing interventions to solve the patient's problems (Berman *et al*, 2015).

Planning can be both short-term and long-term coupled with an expected outcome ensuring that the objectives are simple, measurable, achievable, realistic, and time-bound (Mellish, Oosthuizen & Paton, 2010). Moreover, in this step, where the nurse prioritises the problems in terms of those that need immediate attention, and those that can be attended later on. Planning remains the nurse's responsibility, but active participation is

needed from the patient to ensure the effectiveness of the care rendered and adherence to this programme of care. Besides, to achieve high-quality care planning, patient-centered care approach it is recommended that the routine care approach is utilised (Berman *et al*, 2015). Furthermore, Mamseri (2012) alluded that nursing interventions contain the instructions that serve as a road map to guide other nurses, and members of the multidisciplinary team should follow, hence, all the information collected from the patient throughout the study are recorded on the patient's care plan notes. The format of compiling a care plan is indicated in the table below.

2.4.4 Implementation

Most importantly, Berman *et al*, (2015) indicated that the implementation step represents the “action phase” or doing the phase of the nursing process, where the nurse engages in activities to accomplish the desired goals. This implementation consists of carrying out and documenting all the nursing interventions as planned. Effectiveness of the implementation that is dependent on the nurse's ability to communicate and establish a good nurse-patient relationship. This is aimed at allowing the patient to participate in the provision of his or her care. According to Jansson, Pilhammar, and Forsberg (2011), the importance of the nursing management with their clear instructions concerning care planning, and the nurse's roles are necessary for an implementation to be effective. Examples of interventions demonstrated in this step include:

- Assessing and monitoring (e.g. recording vital signs);
- Therapeutic interventions (e.g. administering medications);
- Assistance with activities of daily living;
- Supporting respiratory functions;
- Supporting elimination functions;
- Managing the environment to promote a therapeutic milieu;
- Providing food and fluids;
- Teaching and/or counselling;
- Consultation and/or referral to other agencies or services; and
- Reviewing and modifying the care plan.

Each step of the nursing process should be updated since the patient's care plan is ever-changing based on the patient's condition (Sparks & Taylor, 2014).

2.4.5 Evaluation

The evaluation phase is a continuous process that includes assessing whether objectives have been achieved or not. It also observes how a patient is responding to the nursing care. If the goals are not met, the nurse has to go back to the drawing board and re-plan to improve the nursing care given to the patient. This is the final phase of the nursing process, where judgment or appraisal is made and it is an ongoing activity, where both the nurse and the patient determine if objectives were met or not (Berman *et al*, 2015).

The purpose of the evaluation is to determine whether the patient-centred goals were met. It is primarily directed at evaluating the outcomes of care, and not the plan of care or the care delivered. Evaluation is an important aspect of the nursing process, because the conclusions are drawn, will determine if the nursing interventions should be terminated, continued, or changed. Evaluation is a continuous process that is done throughout the phases of the nursing process and if the goal is not achieved or the problem is not resolved, the re-planning needs to be done (Berman *et al.*, 2015).the following schematic diagram figure 2.3 represent the steps of the nursing process adopted by Afoyalan, *et al*, (2013).

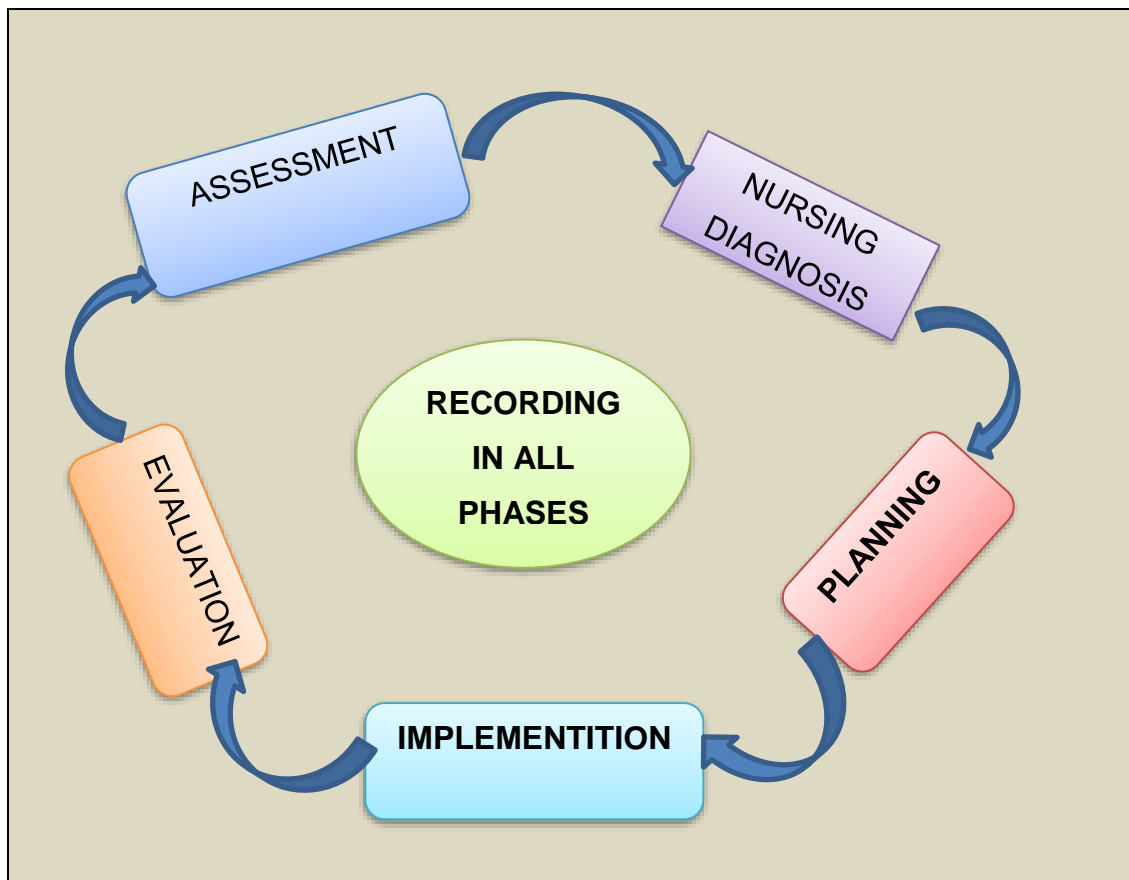


Figure 2.3: Steps of the nursing process adopted by Afoyalan, *et al*, (2013).

2.4.6 Recording

According to Kozier and Erb (2008), the recording is the process of making an entry into a patient’s chart and it is the sixth phase and that it is crucial in patient care. However, a recording is done throughout all the steps of the nursing process. The SANC Rules and Regulations (R387) require that the nurse keeps clear and accurate records of all activities pertaining to the nursing intervention done to the patient. However, failure to do so constitutes professional misconduct. Where the Council could take disciplinary action against the particular nurse. In the nursing practice, it is believed that “what is not recorded has not been done” (Mutshatshi, Mothiba, Mbombi & Mamogobo, 2018).

The importance of recording in nursing is that it defines the nature of the nursing itself by ensuring that the outcome of patient care is recorded. Inadequate, incomplete, and inaccurate nursing documentation hinders the patient’s safety, well-being, and continuity

of care. As another purpose of the recording is to communicate with other members of the multidisciplinary team the patient's progress and general condition (Jefferies, Johnson & Griffiths, 2010). However, Alkouri (2016) also supports the importance of nursing recording outlining that nursing recording is regarded as the most important phase in the nature of nursing as a profession. This is aimed at determining the factors that help to improve the nursing process and others that form part of the foundation of nursing decision making. Mellish, Oosthuizen, and Paton (2010) outline that recording of assessment, nursing intervention implemented, the outcome, and the patient's response to interventions indicate that the nurse provided care.

According to Afoyalan *et al*, (2013), the study found that there was no documentation at the hospital where the study was conducted and that suggested that the nursing process is not applied in the care of patients. This is because when the nursing process is undocumented it is considered not done. Adejumo and Olaogun (2009); Agunwah (2010), argues that the nursing process implementation facilitates the recording of care, and provides a unified language for the profession of nursing. It emphasises the independent function of professional nurses and promotes personal satisfaction as clients' goals are achieved. The process also enhances the professional growth of the nurses as they evaluate the effectiveness of their interventions.

2.5 BENEFITS OF IMPLEMENTING THE NURSING PROCESS IN PATIENT CARE

Implementation of the nursing process approach in patient care is coupled with a variety of benefits to both the nurse, the institution, and the patient. However, Afolayan *et al*, (2013), believe that the nursing process is advantageous to the patient, profession, hospital management, and government since it recognises the health policies that seek to serve the community at large. The following are regarded as benefits of implementing the nursing process in hospitals:

- The nursing process allows the nurse to apply her knowledge and skills in an organised and goal-directed manner;
- The nurse is allowed to communicate about professional topics with colleagues from all clinical specialties and practice setting;

- The nursing process approach is essential in documenting the nursing role in the provision of comprehensive quality patient care (Afolayan *et al*, 2013);
- The nursing process enables the nursing care to transform from traditional methods of care, into a scientific, and patient-oriented approach (Rastian, Farahani, Rassouli & Sarbakhsh, 2016); and
- The nursing process motivates nurses, not only through the collection of more information during interaction with patients, but also promotes active patient participation which is crucial for finding out the patient's needs. This is also a key to improvement in the behaviour, of more safety in the process of nursing care (Parker & Smith, 2010).

Furthermore, Hagos *et al*, (2014) identify the advantages of implementing the nursing process, as a means of setting a global standard upon which nursing care can be audited. He further argues that the nursing process facilitates high-quality nursing care, if used in clinical settings, improves client health outcomes, and amongst others promotes nursing as a professional scientific discipline Hornby (2008). Afolayan, Donald, Baldwin, Onasoga, and Babafemi (2013), states that a nursing process is a tool that is developed based on clinical judgment in the nursing practice. However, the benefit of this approach is that it increases the improvement in the response of patients to care through improved nurse-patient relationships. In spite, the effective utilisation of the nursing process brings about professionalism and accelerates patient outcomes.

Ballack and Poldosky (2008) agree with Afoyalan *et al*, (2013) that the benefits of implementing the nursing process in patient care in that it stimulates the construction of theoretical, and scientific knowledge. It is also an improvement of quality of care grounded on the best clinical practice targeted at collecting data for the improvement of nursing care provided at the time. However, Afoyalan *et al*, (2013) affirm that the effective implementation of the nursing process is also viewed as a tool for monitoring the quality of care, also a system of determining patient information for other multidisciplinary health team members and research. Other advantages of implementing the nursing process in patient care include an individualised approach to patient care while collecting permanent

nursing records, as well as evaluating care, and the continuity of care. Furthermore, Altamier (2010) asserted that the implementation of the nursing process in patient care is regarded as an important step. It contributes to consumer satisfaction where in this case the consumer is the patient in need of the care.

2.6 NURSING PROCESS IMPLEMENTATION IN PATIENT CARE

The nursing process is concerned with individuals who are experiencing suffering and are helpless in need of immediate relief. In this process, the nurse interacts with the patient, hence the patient-nurse relationship is important (Alligood & Marriner-Tomey, 2010). According to Ojo (2010), one of the most important aspects of best practices in nursing care is the implementation of a process of the assessment of patients' condition; formulating a nursing diagnosis; identifying outcomes; planning care; implementing nursing interventions; and evaluating care. The study findings by Mangare, Omondi, Ayieko, Wakasiaka, and Wagoro (2016) reveal that the majority of nurses have knowledge of the nursing process, but they do not apply it in practice. The study further affirms that few nurses carry out tasks related to the various phase of the nursing process, but do not implement it systematically.

The nursing process implementation put emphasis on the independent function of professional nurses. It also stimulates individual personal satisfaction with the fact that patients' goals have been achieved. This further enhances professional growth amongst nurses, when evaluated, the effectiveness of the care they render on their patients will improve (Adejumo & Olaogun, 2009; Agunwah, 2010). The following are the different context of the nursing process implementation.

2.6.1 Nursing process implementation from a global perspective

A review of the relevant literature shows that the implementation of the nursing process has faced many challenges in many countries around the world. Different researchers have provided different points of view when it comes to the implementation of the nursing process in patient care. Despite, many countries coming into an agreement in the application of the nursing process, there are still lots of problems with its implementation. Nonetheless, amongst the problems of nursing process implementation, the most

prominent one is the lack of appropriate training in the clinical nursing process and its performance (Rastian, Farahani, Rassouli & Sarbakhsh, 2016). The nursing process is now continuously used as a universal standard for nursing practice in healthcare systems and this has been adopted in most developed countries like in the United States. All their nursing students who are enrolled starting from their first level of training be exposed to the nursing process model (Zamanzadeh, Valizadeh, Tabrizi, Behshid & Lotfi, 2015).

In the United Kingdom, the nursing process was developed in the mid-70s and was called a problem-solving approach to nursing. The main concern in nursing care in the United Kingdom was individualised patient care through the use of the nursing process which was regarded as the main activity in nursing (Edet, Mgbekem & Edet, 2013). The North American Nursing Diagnosis Association (NANDA) is believed to be the most famous standardised nursing classification, which was established in the United State of America. The first NANDA version was established in the USA in the early 80s and currently, the term NANDA-I (Nanda International) is used in countries worldwide to expand the effort to use the nursing diagnosis (NANDA, 2017).

Currently, the American and Canadian practice standards of nursing practice, put more emphasis on the efficient application of the nursing process in patient care. This further, encourages professional involvement in all the activities that contribute towards the successful implementation of the nursing process approach and the permanent development of knowledge about this methodology (Hagos, Alemseged, Balcha, Berhe & Aregay, 2014). According to the standards of nursing actions in the United States and Canada, performing professional nursing care is expected to continuously use the nursing process. Thus, the active participation of nurses in activities that lead to an increase in knowledge and skills toward the nursing process is highly essential and recommended (Zamanzadeh *et al.*, 2015). In the United Kingdom, it was declared by the government that the department of health should give a directive to all National Health scheme organisations to employ the nursing process facilitators, who will introduce the concept of the nursing process into nursing practice (Lean, 2008).

2.6.2 Nursing process implementation from an African perspective

In various countries in Africa, they have adopted the nursing process as the best approach towards quality patient care, although there are challenges in the implementation in the clinical setting. In a study conducted in four African countries, Kenya, Northwest Ethiopia, Ghana and Nigeria, showed that nurses value the benefits of implementing the nursing process, but it is not commonly used in practice (Edet, Mgbekem & Edet, 2013). A study conducted in Debremarkos and Finote Selam hospitals in Ethiopia presented that the nursing process was implemented by only 37.1% of nurses when caring for their patients (Abebe, Abera & Ayana, 2014).

According to a study conducted by Mahmoud and Bayoumy (2014), nursing practice demands a persistent and high level of critical thinking leading to critical actions. The continuous growth of nursing as a profession requires nurses to be able to apply logical and rational thinking while solving the patients' problems. Thus, to make the appropriate decision about their care. The study further recommends that other factors such as shortage of staff, and the creation of a conducive environment to render effective, and efficient nursing practice, were regarded as the main aspect that affected the professional nurses' ability to conduct adequate practices in public hospitals.

According to Afoi, Emmanuel, Garba, Gimba, and Afuwai (2012), problem-solving skills and critical thinking are inherent in the provision of quality patient care. It reinforces the need on the part of professional nurses to effectively implement the nursing process. In Kenya, the training curriculum for all teams of nurses adopted the nursing process as a framework for delivering nursing. Although, the nurses consider the implementation of the nursing process in patient care a tiresome, and difficult activity which in turn contributes to poor quality patient care in public hospitals (Nyatichi, 2012). The Kenya Ministry of Health included documentation as the sixth step of the nursing process, in response to challenges related to documentation as observed by nurse administrators during their support, and supervisory visits to the hospitals (Wagoro & Rakuom, 2015). In clinical settings of low and middle-income countries where the nursing process is implemented, inadequate knowledge and incompetence are leading to poor implementation of the nursing process (Alfaro-LeFevre, 2010).

2.6.3 Nursing process implementation from the South African perspective

Nurses in South Africa, constitute the largest workforce of the health care service providers. Whose main aim is the promotion of health and the provision of essential health to the entire community. The main categories of nurses in South Africa include professional nurses, enrolled nurses, nursing auxiliaries, and the majority of professional nurses are also trained, midwives, and accoucheurs. Thus, the Nursing Act uses the terms nurse and midwives interchangeably. There is a disaster in nursing due to a shortage of staff, reduced interest in the profession, lack of caring ethos, and disparities between the needs of nurses, and those communities they are serving (Rispel, 2013).

The findings of a study conducted in South Africa posits that the advancement of the country towards the Universal Health Coverage is aimed at ensuring that every citizen can access the health care services, regardless of their ability to pay, which is dependent on the effective achievement of the nursing challenges (Ausserhofer, Schubert, Desmedt, Blegen, De Geest & Schwendimann, 2013). Despite the health care challenges, the study carried out by Armstrong and Rispel (2015) found that South Africa has strategic plans on human resources utilisation for health, nursing, education, training, and practice. It also has an adequate system of regulation and accreditation of nursing education through the South African Nursing Council.

The nurses in South Africa are entitled to practice their profession within the legal parameters of the country. This legal framework binds nurses to act responsibly and be accountable for all their nursing actions. The nursing process is viewed as a framework within which the nurse should function, as set out by the South African Nursing Council's Scope of Practice (SANC, Regulation 2598). The following legislation applies to nursing practice to ensure the provision of quality patient care.

- *The Constitution of the Republic of South Africa, Act No. 108 of 1996*

The Constitution is regarded as the supreme law of the country. According to the Constitution of the Republic of South Africa (1996) Section 27(1) (a), states that every individual has the right to have access to quality health care services. Section 10 of the Constitution further outlines that every person has the right to dignity and that his or her

dignity be protected and respected at all costs. This implies that nurses are expected to use the nursing process approach when treating their patients, because it focuses on the uniqueness and individuality of each patient hence the achievement of quality patient care.

- *The Nursing Act, Act No. 33 of 2005*

The purpose of this Act is to regulate the nursing profession and provide direction for other related matters. Amongst other objectives, the Act provides for training of properly qualified nurses who could serve the community with the highest level of competence. The ultimate goal is to produce a knowledgeable, confident, and competent nurse practitioner, who will contribute to the development of health care services that provide quality nursing care to the public. According to the Nursing Act (Act 33 of 2005), the registered professional nurse in charge of the ward is accountable for all acts and omissions related to patients entrusted under her care.

- *The South African Nursing Council (SANC) Rules and Regulations R2598 as amended*

SANC Rules and Regulation R2598 makes a provision for the scope of practice of various categories of nurses, including registered professional nurses. The Scope of Practice of registered professional nurse (R2598) requires a registered professional nurse to be able to assess, diagnose, provide care plans, intervene in patient care, and evaluate patient responses to care and record nursing care rendered to the patient. All the steps of the nursing process implemented during patient care are to be recorded accurately.

- *The South African Nursing Council (SANC) Rules and Regulations R387 as amended*

The South African Nursing Council Rules and Regulations (R387) stipulates the acts and omissions under which the SANC may take disciplinary steps against a nurse practitioner. The nurse can act inappropriately, inadequately or omits to render care to patients as deemed necessary. In these practices they include omitting to act in respect of diagnosis, treatment, care, collaboration, referral, patient advocacy, incorrect patient identification, and failure to keep clear and accurate records of patients. Nurses also perform dependent

and independent functions when caring for their patients. They are expected to act appropriately and responsibly when implementing all the stages of the nursing process during the provision of care to patients.

- *The South African Nursing Council (SANC) Rules and Regulations R425 as amended*

The South African Nursing Council in its Rules and Regulation (R425) approved an education and training programme. The R425 training programme objectives are aimed at producing a professional nurse who is skilled in the diagnosing of an individual, family, group, and community health problems. The planning, implementation of therapeutic action, and nursing care for the consumers of health service at all times throughout the stages of life including care of dying, and the evaluation thereof.

- *The South African Nursing Council (SANC) Rules and Regulations R174*

The South African Nursing Council in its Rules and Regulation (R174) approved a new education and training nursing programme to replace the R425 which is being phased out. The SANC rules and regulation R174 makes provision for the approval of and the minimum requirements for the education and training of a learner leading to registration in the categories Professional nurse and Midwife. The programme is aimed at producing a professional nurse who is competent in diagnosing of an individual, family, group and overall community health needs.

2.7 FACTORS INFLUENCING IMPLEMENTATION OF THE NURSING PROCESS

The implementation of the nursing process in public hospitals could be influenced by multiple factors which in turn contribute to poor quality of the nursing care. Aseratie, Murugan, and Molla (2014) indicate that the inadequate implementation of the nursing process also contributes to the health service disorder of the service. The role conflicts amongst health care workers, medication mistakes, poor disease prognosis, recurrent readmissions, increased public dissatisfaction with the care provided, and increased in mortality rate. The study further concluded that the implementation of the nursing process is important for the practice of nursing. However, its use is not easy due to a variety of factors which include professional, institutional management, and patient factors.

2.7.1 Professional factors

The study conducted by Aseratie *et al*, (2014) in Ethiopia revealed that in most public hospitals nurses became dissatisfied with their caring role due to a large number of patients they were admitting. However, based on the nature of the nursing profession, it is more common that when nurses are dissatisfied with their job even the nursing care, the service they provide to their patients will be done haphazardly. Therefore, the nursing process approach could not be implemented effectively in public hospitals. The study further indicated that the professional factors are ranked at the third-highest level and they play an important role in the use of the nursing process. There is a tendency of neglecting them when issues of implementation of the nursing process are attended to. The professional aspect can result from the following:

2.7.1.1 Inadequate motivation by the professional associations

Professional associations have the responsibility of promoting the use of the nursing process during patient care in hospitals. According to Olaogun, Oginni, Oyedeji Nnahiwe, and Olatubi (2011); Adenike and Olaogun (2013), nurses observed prefer the utilization of the medical model of care, rather than the nursing care model which is specifically designed for professional nursing practice. The medical model of care is not well understood by other nursing professionals, the patients, and their families. The professional influence is of a major concern than other factors. The profession is made up of factors that include education coupled with thorough knowledge and skills to distinguish the nursing profession from other professional codes of ethics, research, and autonomy amongst other requirements.

2.7.1.2 Increased workload amongst nursing professionals

Nurses in most hospitals are faced with an overwhelming workload. This can impact negatively on nurses. As they are most likely to spend time performing various tasks and procedures that benefit the patients leading to inadequate practices on aspects that have a direct effect on patient results. When nurses are no longer satisfied with their jobs due to extra workload, this predisposes them to a decreased morale, increased absenteeism rate, increased personnel turnover, and inadequate work practices which put pressure on the quality of care rendered to patients (Aseratie *et al*, 2014). Another study conducted

by Zewdu and Abera (2015) on determinants towards Implementation of the nursing process revealed that 51.2% of the respondents were dissatisfied with the aspect of their job because they were caring for so many patients. The study then further indicates that the nursing workload affects the time that a nurse can assign to various tasks. Thus, under such a heavy workload, nurses may not have sufficient time to perform tasks that can have a direct effect on patient safety. Therefore, a conclusion was made that in hospitals with high patient flow beyond the capacity of nurses the implementation of the nursing process is affected.

2.7.1.3 Resistance to change

The resistance to change, professional development and advancement challenges amongst nurses influence the implementation of the nursing process in hospitals. There is a tendency amongst some nurses to hold previous knowledge and skills without trying to improve. While adapting and maintaining new skills because the majority of nurses are not ready to keep abreast of education and development of new skills in the nursing practice (Ogbuokiri, 2011). Other factors such as nurses' perception, experience, lack of time, and difficulty with the formulation of nursing diagnosis characteristics serve as barriers to implementation of the nursing process in health institutions (Manal & Hala, 2014).

2.7.1.4 Inadequate knowledge of the practical implementation of the nursing process.

According to Mbithi (2015), nurses have inadequate knowledge of the practical implementation of the nursing process. This marks a gap that impedes the implementation of the nursing process approach on their day to day routines care. Study findings by Hagos *et al*, (2014), revealed that there is a lack of adequate knowledge on the nursing process concept or on how to implement the process. Thus, this was found to be the most important factor in preventing proper implementation of the process in patient care. Dominguez-Bellido *et al*, (2012), are of the view that the formulation of the nursing diagnosis is based on patient' history, implementation of nursing prescriptions, and recording of the evaluation on expected outcomes was observed as the most problematic areas. The study further recommends continuous evaluation of how the nursing process is implemented within the health services.

Baena de and Moraes Lopes, (2010) found out that sometimes nurses view the nursing process only as a documentation activity. The study further outlines that in other instances there is a tendency from nurses to document only nursing interventions not mentioning nursing diagnoses due to challenges in the formulation of nursing diagnosis. These inadequate practices can lead to inaccuracy in the care given to patients since the nursing process is not followed accurately, and in that instance, the nursing diagnoses are no longer guiding the interventions (Baena de & Moraes Lopes, 2010). After the training of nurses regarding the implementation of the nursing process, the nurses demonstrate increased ability to its use and proper formulation of the nursing diagnosis has been increased. The thorough emphasis on the implementation of the nursing process in patient care during education for nursing students can minimise problems associated with the nursing process (Kaji & Farahani, 2011; Hasson & Arnetz, 2008).

According to the study findings by Agyeman-Yeboah, Korsah, and Okrah (2017), the nurses were not implementing the nursing process in the ward because they do not understand it properly in clinical practice. Adeyemo and Olaogun (2013), confirm that some nurses were having difficulty in the clinical implementation of the nursing process because of some professionals in the health system do not quite understand what it entails. Nurses require the highest level of competency during the execution of their professional roles and this requires continued competence. Most importantly, they fail to maintain such a level of competence during nursing, skill, and knowledge. Lack of practical knowledge affect the implementation of the nursing process (Abdelkader & Othman, 2017). Further recommend that the introduction of educational programmes enhance nurses' ability to use the nursing process to improve quality of the patient's care.

Agunwah (2010), found that poor knowledge of the practical use of the nursing process influences the inadequate utilisation of the nursing process. Personal abilities hindering the correct implementation of the nursing process include lack of preparedness or knowledge about the nursing process or some parts of it, as mentioned before (Baena de & Moraes Lopes, 2010). The study conducted by Mamseri (2012), concludes that 63% of the respondents confirm that in real nursing practice, implementation of the nursing process is slowed down by the inadequate practical knowledge, and skills of nursing staff.

2.7.1.5 Attitudes of nurses towards the nursing process

The attitude of nurses towards the implementation of the nursing process influences the effectiveness of its practical implementation. According to the results of a study conducted by Granero-Molina, Fernandez-Sola, Peredo de Gonzales, Aguilera-Manrique, Mollinedo-Mallea and Castro-Sánchez (2012), the female students show more positive attitudes towards the nursing process implementation compared to their male counterparts concerning their ability to use the nursing process in providing high-quality caring. According to Yildirim and Ozkahraman (2011), nursing practice requires a fair-mindedness to adapt to new evidence. Nonetheless, a willingness on the part of the nurse to reconsider clinical judgments throughout the process of caring for their patients. Can also be applicable when implementing a nursing process approach to patient care to enhance quality and individualised care.

According to a study conducted by Momoh and Chukwu (2010), 84% of the nurses claim that there is a negative attitude amongst nurses, towards implementing the nursing process. The issue of negative attitudes and beliefs about the implementation of the nursing process communicated amongst nursing personnel was also confirmed in a study conducted in Namibia (Jooste, Van der Vyfer & Van Dyk, 2010).

2.7.2 Institutional management factors

Aiken *et al*, (2012) state that improved work environments have reduced ratios of patients to nurses. Thus, there were associated with increased care quality and patient satisfaction. The study further found that shortages in hospital care quality were common. Aiken *et al.*, further recommended that the improvement of hospital work environments could lead to low-cost strategy. Which can improve safety and quality in the hospital care, hence, an increase in patient satisfaction. According to Baraki, Girmy, Kidanu, Gerensea, Gesehgne, and Teklay (2017), nurses working in a stressful environment of the workplace were 99% less likely to implement the nursing process than nurses who worked in a different environment. The other management factors include the following:

2.7.2.1 Shortage of nursing staff

The deterioration in the standards of provision of nursing care in public hospitals remains a huge challenge in South Africa. This is due to a shortage of trained professional nurses, a lack of resources to function effectively, inadequate treatment modalities. The challenges are related to an inadequate number of nurse specialists, leading to those few professional nurses to have a huge burden in caring for more patients, often, without the required skills (Luhlima, Mulaudzi & Phetlhu, 2014).

Most public hospitals are faced with challenges regarding the nursing process. This includes the scarcity of the nursing resources; difficulty in engaging nurses at all levels in the implementation of the nursing process and quality improvement activities. When institutions require high-quality patient care. They are dependent upon their ability to participate and utilise nursing resources effectively. Although, there are challenges because these resources are increasingly scarce (Abebe, Abera & Ayana, 2014). The study further outlines another institutional factor in the implementation of the nursing process which is the orientation of nurses during the entrance into the respective hospitals. Thus, that is where those orientated are more likely to implement the nursing process than those that are not orientated.

Another study conducted by Julie, Simon, Irène, Charles, Mahuridi, Narcisse, and Françoise (2017), the barriers to the implementation of the nursing approach in public hospitals in Lubumbashi, in the Democratic Republic of Congo. The study proved that 75.6% of the respondents pointed out that a major obstacle to the implementation of the nursing process is due to the inadequacy of the nursing staff. In a study conducted by Lopes, Higa, Dos Reis, de Oliveira, and Christóforo (2010), the shortage of nurses is a major concern for most hospitals. This is because the challenge affects the provision of adequate nursing resources for other key activities, such as quality improvement. This affects their ability to provide nursing coverage for patient care.

Mamseri (2012), and Mahmoud and Bayoumy (2014) in their studies agree that a lack of resources in hospitals was viewed as an obstacle towards the implementation of the nursing process. For this reason, the nurses are melancholic about factors such as staff shortages and the establishment of an environment conducive to effective and efficient

nursing practice are viewed as important aspects. Thus, that affected the professional nurses' ability to conduct adequate nursing practice in hospitals. These challenges are the main contributing factors toward quality patient care, are manageable if the professional nurse can properly implement the nursing process approach in patient care.

2.7.2.2 Lack of collaboration between hospital management with nurses.

The effective implementation of the nursing process in hospitals requires active collaboration with hospital management. The implementation of the nursing process involves issues of finance, equipment, implementing tools, and personnel. The shortage of resources, lack of knowledge, high patient-nurse ratio, increased workload, lack of training, and motivating factors that affected the application of the nursing process (Akbari & Shamsi, 2011). Queiroz, Sant'Ana, Oliveira, Moinhos, and Santos (2012) outline that there was overload with governmental, organisational, and administrative activities. Nevertheless, with all the delay it hinders the progress in their professional practice. Nursing managers and authorities of nursing training should make efforts to minimise barriers to effectively implement the nursing process by providing facilities to improve the nursing process and service quality based on the nursing process standards.

2.7.2.3 Shortage of equipment and supplies

Another challenge that hinders the effective implementation of the nursing process is a shortage of equipment and supplies. In a study conducted by Afolayan, Donald, Baldwin, Onasoga, and Babafemi (2013), the study revealed that the unavailability of materials for documentation is a problem in most hospitals. The nurses struggle to get the necessary charts for the effective practice of nursing care in hospitals. As they are lacking or it is ineffective in the application of the nursing process. This is because it requires a stable supply of materials for observations, monitoring, assessment, and documentation. The study further recommends that the hospital management including the medical directors should be educated on the benefits of implementing the nursing process in terms of patients' outcomes. This is to enhance the regular supply of the needed materials for the practice of the nursing process.

2.7.2.4 Lack of motivation from senior staff

The success of any organisation depends on the ability of managers to be able to provide an environment that is motivating for its employees (Germain & Cummings, 2010). Furthermore, to achieve goals in each institution, the goals of any institution require adequate supervision, guidance, and support from senior personnel. Thus, nurses also need support and motivation at the workplace from managers. The senior personnel who understand how they work, respect their expertise, and offer security. Adequate motivation from senior staff members promotes team rebuilding. Where the main focus is on the patients and manageable workloads. This will enhance the effective implementation of the nursing process (Jooste, van der Vyfer & van Dyk, 2010).

In another study conducted by Akbari and Shamsi (2011), the findings reveal that the lack of adequate support from the management systems also acts as a barrier to effective implementation of the nursing process in public hospitals. The study concluded that 76.2% of the respondents supported the idea that the lack of authorities' support for the implementation of the nursing process also acts as a barrier to effective implementation of the approach. The study recommends that health care authorities should help in the promotion of health care by providing necessary situations for nursing process implementation in public hospitals.

According to a study by Adeyemo and Olaogun (2013), the majority of health care institutions are experiencing the challenges, in assisting their professional nursing staff, to improve their understanding of the formulation of the nursing diagnoses, and documentation skills. However, the identification of the patient's problems and development of appropriate care plans that will enhance quality patient care. Another study conducted by Agyeman-Yeboah, Korsah, and Okrah (2017) also identify that lack of support from senior nurses affects the nursing process. Hence, some nurses do not know how to apply the nursing process. Thus, it influences the young nurse's ability to use the nursing process. Hagos *et al*, (2014) postulate that most of the enabling and reinforcing factors are that management does not support or motivate nurses to implement the nursing process. Manal and Hala (2014), recommend that the government should re-emphasise on the provision of adequate resources such as materials, nursing

human power, and motivate nursing professionals, so, that the nursing process can be implemented in patient care.

2.7.3 Patient factor

According to Larsson, Sahlsten, Segesten, and Plos (2011), patients are important participants during the nurse-patient interaction when implementing the nursing process.

2.7.3.1 Participation between nurse and patient

The active participation in this instant is highly dependent on the readiness on the part of the nurse to consider the patient as an active partner, in decision making, and planning of the care. Additionally, Larsson *et al*, (2011) outline that participation can be achieved if nurses can be given the power through communication, and setting goals, and objectives together with the patient. Active participation between nurses and patients was found to be associated with increased fear, insecurity, and anxiety levels of patients during their care. Factors contributing to patients not participating actively in nursing care are; facing own inability, experiencing lack of empathy, identifying structural obstacles, also the patient feeling a sense of an authoritative attitude from the nurse.

2.7.3.2 Presence of patients with complicated cases

Abebe *et al.*, (2014), identified other factors that influence the implementation of the nursing process in public hospitals. This includes the presence of patients with complicated cases, whereby their condition is critical and require attention during their care. The incidence of patients with uncomplicated cases enables the implementation of the nursing process. As compared to instances with complicated cases. Therefore, patient care practices and nursing processes should be assessed, and monitored periodically to provide in-service training programmes to improve its implementation.

2.7.3.3 Economic status of the patient

During the implementation of the nursing process, the nurse, and patient emerge as partners in a mutual relationship built on trust. Directed toward getting the most out of the patient's strengths, maintaining integrity, and promoting adaption to illness (Afoyalan *et al*, 2013). According to Zewdu and Abera (2015), the economic status of the patient

enabling the collect material for nursing care, with early discharge demanded by most patients. Therefore, they experience a lack of cooperation, and complicated problems serve as determinants to effective implementation of the nursing process in hospitals. The study also identified that the level of knowledge amongst patients is among those factors affecting nursing process implementation. This patient-related factors also impact negatively on the quality of nursing care, disordered system, conflicting role, medication error, and recurrent re-admission with similar problems. Moreover, dissatisfaction with the care patients has received increased mortality (Zewdu & Abera, 2015).

2.8 STRATEGIES TO IMPROVE IMPLEMENTATION OF NURSING PROCESS

Zamanzadeh, Validazeh, Tabrizi, Behshid, and Lofti (2015) suggest that poor understanding of the nursing process is the main challenge in nursing practice. Therefore, recommended that the best strategy to achieve and minimise the challenges is to equip nurses with knowledge and skills on the implementation of the nursing process. Hence, the development of expert teams in nursing education training institutions. Fernandes-Sola, Granero-Molina, Aquilera-Manrique, Peredo de Gonzales, Castro-Shanchez, and Perez-Galdeano (2011) identified factors such as lack of time, shortage of resources, and lack of continuous training as obstacles towards effective implementation of the nursing process. Thus, it was suggested that active involvement, coordination, and strengthening of the support between nurses in clinical and nurse training institutions. It was further recommended that the implementation of a training programme, the development of evaluation instruments and continuous meetings with experts can improve nursing process implementation in hospitals (Fernandez-Sola *et al*, 2011).

2.8.1 Patient participation in the implementation of the nursing process

Patient participation refers to a situation where a patient is actively involved in almost every aspect of care. Active participation is dependent on the willingness on the part of the nurse where. The patient is regarded as an active partner in the decision making and the planning of care (Larsson, Sahlsten, Segesten & Plos, 2011). Furthermore, according to Larsson *et al*, (2011) for active participation to be achieved with ease, the nurse should value the knowledge that the patient possesses concerning his or her situation. Therefore, not only acknowledging the participation in the decision-making process but valuing the

patient. The authority that nurses impose on the patients is ought to be shared through respect, open and active communication. The goals are set together with the patient and by so doing active participation can be attained. Thus, patient participation in the care can be enhanced in many ways as there are a variety of approaches to enhance active patient participation namely:

2.9.1.1 Interpersonal procedure

This is a situation where active patient participation is achieved through a dialogue between the nurse and the patient in mutual interaction. Besides, to achieve these views and opinions of both participants should be discussed openly (Larsson *et al*, 2011).

2.8.1.2 Therapeutic approach

This is described as a technique used by the nurse to create a professional caring relationship that will assist in reassurance, empathy, and maintenance of a professional distance while acknowledging their attitudes (Larsson *et al*, 2011).

2.8.1.3 Focus on resources

In this approach, the nurse has to make an effort to recognise the patient's resources. Hence, they will match them with the care the patient needs. This can be achieved together with the patient, significant others, and other health team members. Thus, to ensure all participants in the caring process understand each other well (Larsson *et al*, 2011).

2.8.2 Professional training and development

The terms “training and development” are often used interchangeably and sometimes they are viewed as synonymous, but there are discrete differences in how they are used within various contexts. Training plays a major inevitable role in improving the quality of care rendered to patients. Clinical training is effective. They constitute a vital part of the professional training of competent nurses in the acquisition of clinical skills. The educated employees are the keys to success in the health care centre's, as well as hospitals. Consequently, staff training is important because it leads to greater productivity, fewer accidents or errors, higher job satisfaction, and improved nursing care (Rastian *et al*, 2016). According to Elnaga and Imran (2013), effective training and development

programmes are aimed at improving the employees' performance, bridging the gap between the current performance and the standard desired performance. This could be given using methods like the coaching, mentoring, peers' cooperation, and participation by the subordinates.

2.8.2.1 Continuous training of professionals

Continuous training of professionals is viewed as the most suitable way of sustaining professional competence. While ensuring adaptation to new scientific-technological advancements. Training of professionals enables deficiencies in training to be rectified and encourages the correct use of health care services to ensure quality. The awareness of training demands nurses and training needs to be viewed as an initial step of a cyclical process that contributes to global education, and education approaches for the group of professionals. Nursing professionals agree that continuous education needs to be adjusted to their jobs and careers. Education should be viewed as a continuum, which begins with training. A strong gap exists between theory and practice in the nursing field. The nurses pay more attention to scientific and skill aspects ignoring the science and art of nursing (Atashzadeh, Shoorideh & Ashktorab, 2011)

2.8.2.2 In-service training

In-service training is the training of an employee while performing the job or the execution of the service to the customers within an institution or organisation (Booyens & Bezuidenhout, 2013). However, Bluestone, Johnson, Fullerton, Carr, Alderman, and Bontempo(2013) asserts that in-service training represents an important financial investment for supporting continued competence of the health care personnel. This remains a significant investment in increasing and maintaining important competencies required for optimal public health in all global service settings. In-service training can broadly be categorised as an induction or orientation training, foundation training, on-the-job training, refresher or maintenance training, and career development training. For institutions to have proper development of extension staff throughout their service life, all the following types of training are important (Bluestone *et al*, 2013).

2.9 CONCLUSION

The literature review discussed in this chapter, provided a background about the description of the implementation of the nursing process in patient care. This chapter presented a synthesis of relevant literature on the description of the nursing process; the phases of the nursing process; the implementation of the nursing process from various contexts; the factors influencing the implementation of the nursing process; and the strategies to improve implementation of the nursing process. In this study, literature review was also used in the introduction to highlight the background of the problem and will again be presented in Chapter four of the study to confirm or contrast the research findings.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

The purpose of this chapter is to describe and explain the research methodology that the researcher used in this study. Research methodology refers to the logical process that the researcher followed, when applying scientific methods and techniques, when investigating a particular phenomenon (Polit & Beck, 2012). The main purpose of Chapter three is to describe the research design. The method for the study leading the development of a training programme for professional nurses to improve the implementation of the nursing process in public hospitals of Limpopo Province, South Africa. Later in this chapter, the description of the research method and design used are outlined, the study site, population, sampling procedures, sample size, data collection methods, data analysis, pilot study. The procedures to ensure validity, reliability, the trustworthiness of the research findings, and observance of ethical standards throughout the study are presented.

3.2 RESEARCH DESIGN

The research design presents the overall plan of the research. The researcher engages with the participants to achieve conclusions to address the research aims and objectives. The research design allows the researcher to describe what should to be explored. Thus, to describe how the study was carried out (Brink *et al.*, 2012). Research design is a type of inquiry within either a qualitative, quantitative, and mixed methods approach which gives direction for techniques to be followed in the study, and some researchers regard them as strategies of inquiry (Denzin & Lincoln, 2011).

3.2.1 Mixed method convergent parallel design

According to Creswell (2014), mixed-method convergent parallel design is a type of mixed method design, where the researcher converges or merges quantitative and qualitative data to provide a comprehensive analysis of the research problem. In this design, the researcher collects both quantitative and qualitative data at the concurrently, while analysing and interpreting data. Then the researcher integrates the information

during the interpretation of the overall results. If there are contradictions or dissimilar findings, these incongruent findings are clarified or further investigations are done.

The researcher opted for a mixed-method convergent parallel design where both qualitative and quantitative strands have equal priority to achieve the objectives of the study. The results of the two strands were merged interactively, accordingly, that the point of the interface occurs during the analysis and overall interpretation of the findings. Thus, to check the extent to which the two sets of results converge, diverge, and relate to each other. The main advantage of using the convergent parallel design is its efficiency because both data were collected simultaneously. The main advantage of using the convergent parallel design is its efficiency because both qualitative and quantitative data are collected concurrently (Polit & Beck, 2012; Creswell, 2014).

The purpose of combining both varieties of data within a study, is that neither quantitative nor qualitative methods are adequate by themselves to capture the tendencies and specifics of the given situation. The advantage of using both approaches in a single study is that they can complement each other. Furthermore, they also allow for rigorous analysis and taking into consideration the strengths and weaknesses of each approach (Creswell & Plano Clark, 2011). The mixed-method design was selected because there is the integration of both the quantitative and qualitative approaches to generate new knowledge. Nevertheless, the qualitative and quantitative approaches are kept separate to maintain the strength and integrity of each paradigm (Creswell & Plano Clark, 2011).

Polit and Beck (2012) describe the benefits of using a mixed-method design as follows, complementarity, practicality, incrementality, enhancement of validity, and collaboration.

- *Complementarity*

When using a mixed-methods design, the design enables the researcher to use numbers (quantitative data) and words (qualitative data) to reduce the limitations of a single approach. Thus, in this mixed-method design, one approach is complementing the other and avoiding the limitation of a single approach.

- *Practicality*

The questions on the implementation of the nursing process as a complex aspect in nursing practice also need multiple approaches. Hence it is cardinal to employ a combination of both the qualitative and quantitative approaches in this study.

- *Incrementality*

The development of the research topic tends to be gradual, relying on feedback loops. Therefore, by using qualitative findings a hypothesis can be generated and be tested quantitatively. While in qualitative findings clarification can be achieved during an in-depth interview session

- *Enhanced validity*

When supporting a model with multiple and complementary types of data, the researcher obtains the validity of the results (Polit & Beck, 2012). In this triangulation method chances for testing different interpretations of the data and the degree to which the content shapes the results are possible.

- *Collaboration*

When using a mixed-method approach both the quantitative and qualitative researchers can obtain an opportunity to collaborate well while working on the same problem.

3.2.2 Triangulation design

Triangulation is the use of numerous methods to gather and interpret data about a phenomenon, and to converge on an the accurate picture of reality (Polit & Beck, 2008). Moule and Goodman (2014), explain triangulation as the use of two or more research approaches, data collection methods, or analysis techniques in a study. In mixed-method approach, using a concurrent triangulation design the researcher employs a single phase plan where the quantitative and qualitative methods are utilised, during the same time-frame, with equal weight or priority (Creswell & Plano-Clark, 2011). There is an integration of the results of the two methods during the interpretation phase where there are confirmations, cross-validation, and corroboration of the findings within a single study. This research approach assisted the researcher in providing a comprehensive picture of the findings (Grove *et al*, 2013).

The researcher collected data from professional nurses in various levels (person triangulation), on the practices and explored their learning needs during the implementation of the nursing process from different districts (space triangulation), hence methodological triangulation. In data, triangulation data were collected in the same period using various methods on the same phenomenon, and the findings integrated during interpretation. In this study, qualitative data were collected using semi-structured interviews while quantitative data were collected using a self-administered questionnaire (Polit & Beck, 2008).

The cross-site consistency was tested through space triangulation where data were collected on the same issues from diverse locations (Polit & Beck, 2008). The researcher collected data from five regional hospitals in the four districts of Limpopo Province. Person triangulation was ensured by collecting data from different levels of professional nurses aimed at validating data through a variety of viewpoints. The researcher used the services of a statistician during the analysis of quantitative data and an independent coder to confirm the themes, and all these measures were done to enhance the trustworthiness, validity, and reliability of the research findings.

The researcher opted to use the mixed-method research design based on the above-outlined advantages. Thus, to come up with findings that enable development and implementation of a training programme to improve implementation of the nursing process in public hospitals of Limpopo Province. Moreover, to enhance the credibility of the study. The following schematic diagram figure 3.1 represents the convergent parallel design, adopted from Creswell (2011).

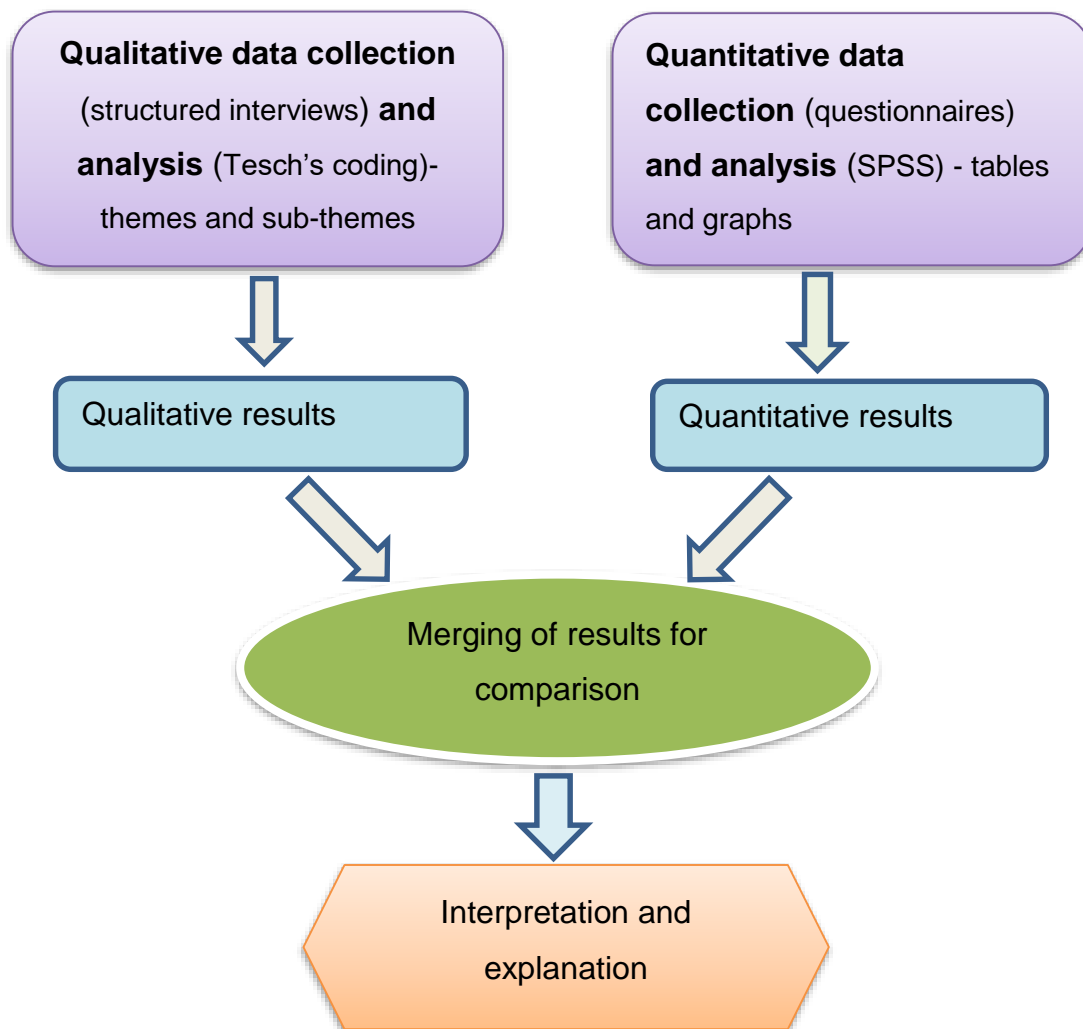


Figure 3.1: Schematic representation convergent parallel design, adopted from Creswell (2011).

3.2.2 Historical background of a mixed-method

According to Polit and Beck (2012), mixed-method research studies were there for decades, but the development of its methodology and acceptance are new aspects. The method originates from the arguments of philosophical and methodologic arguments between the post-positivist and the constructivist sides during the early 1970s and 1980s. Mixed method research became more prominent in the 21st century referred to as the third research community. It is mostly associated with the pragmatic paradigm trusting

that the question is of value than the methods used. Pragmatic paradigm argues, that the inductive and deductive reasoning are both important as they can generate and validate the theory, using them leads to good evidence. Creswell and Plano-Clark (2011), indicate that a mixed-method approach is recently the subject of articles, special editions of journals, and books. Thus, the researcher opted to use the mixed-method to collect rich data to develop and implement a training programme that aid to improve implementation of the nursing process in public hospitals in Limpopo Province.

3.3 RESEARCH SETTING

Limpopo is the fifth largest province of nine in South Africa covering 10.3% of South Africa’s total land area. Approximately 80% of the population in Limpopo reside in rural areas. The province borders neighbouring countries such as Botswana to the west, Zimbabwe to the north, and Mozambique to the east. In the Eastern region lies the northern half of the wonderful Kruger National Park. The province is further divided into five districts, namely, Mopani on the South East, Capricorn on the South-West, Waterberg on the West, Sekhukhune on the South East, and Vhembe District on the far North (Statistics South Africa Mid-Year Population Estimates, 2014). The study was conducted in public hospitals in Limpopo Province, South Africa. The following schematic diagram figure 3.2 represent the map of Limpopo province.

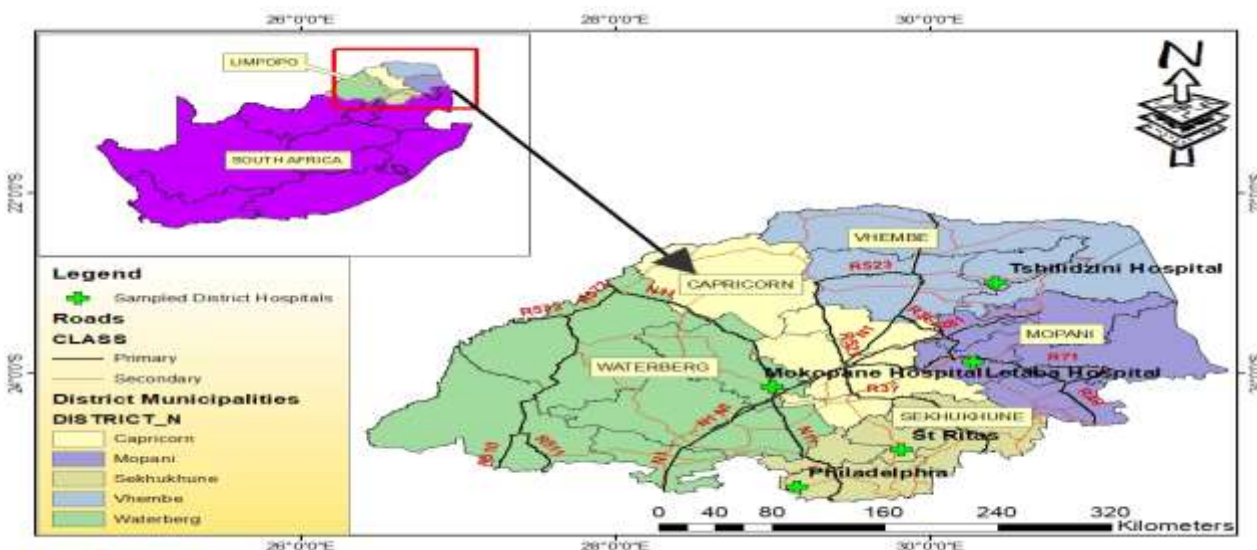


Figure 3.2: Map of Limpopo Province hospitals (LDoH, 2011)

The health structure in Limpopo Province consists of 40 public hospitals, in total, of which two are tertiary, five are regional, thirty are district hospitals, and three are specialised hospitals. The province consists of 25 community health centres and 452 fixed clinics as shown in the health service structure below. The following schematic diagram figure 3.3 represent the health service structure in Limpopo province.

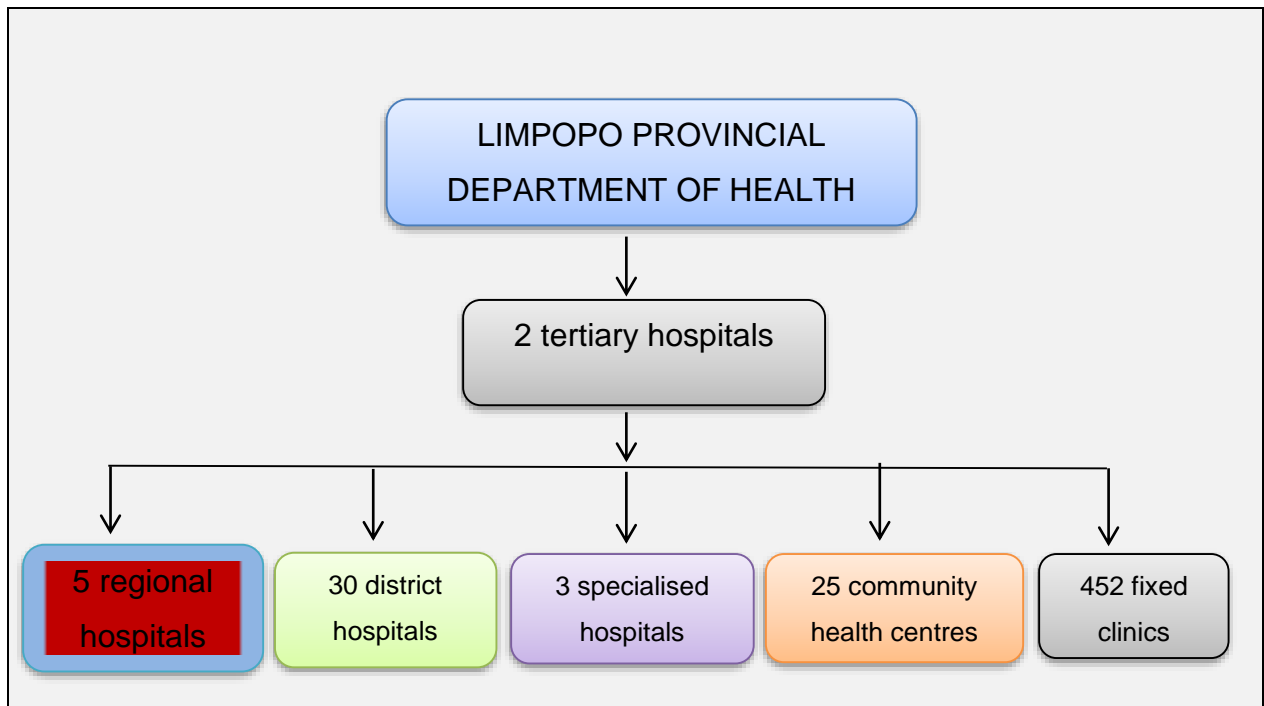


Figure 3.3: Health service structure in the Limpopo Province(LDoH, 2016)

3.4 POPULATION

According to de Vos *et al*, (2011), a population is explained as the set of individuals who have some common characteristics. The population also refers to a total number of all subjects that conform to a particular set of specifications (Polit & Beck, 2012). The population was all professional nurses implementing the nursing process in public hospitals of Limpopo Province, South Africa. The target population was all professional nurses who are implementing the nursing process in regional hospitals of Limpopo Province. Therefore, accessible population according to Polit and Beck (2012), is the total that conforms to the selected criteria and is all those professional nurses who are

implementing the nursing process in the general wards of the regional hospitals of Limpopo Province. The population for this study is 973 professional nurses.

3.5 THE QUALITATIVE STRAND OF THE STUDY

Qualitative strand enables the researcher to collect data in a natural hospital setting, where professional nurses would be implementing the nursing process. The researcher would act as a key instrument for collecting data from professional nurses (Marshall & Rossman, 2011). The researcher wanted to get all the realities from the people who experienced them because in qualitative design the meanings of the world view are described by the participants themselves (Creswell, 2009). The qualitative strand of the research allows the addressing of issues concerning nursing care in clinical settings where nurses delivered care to understand how a particular phenomenon is managed (Jooste & Mothiba, 2013).

A qualitative research strand in this study enables the researcher to explore the in-depth, fullness, and complexity of the lived experiences of professional nurses when implementing the nursing process in the wards (Grove, Burns & Gray, 2013). The researcher needed to qualitatively explore, and describe the practices of professional nurses during the implementation of the nursing process. Consequently, to develop a training programme to improve its implementation at public hospitals in the Limpopo Province, South Africa.

3.5.1 Sampling procedure and sample

Sampling refers to taking of any proportion of the entire population as representative of that specific population (Polit & Beck, 2012). Polit and Beck (2012), further explain a sample as a subset of the population selected to participate in a research study.

3.5.1.1 Sampling of the hospitals

Purposive sampling technique was used for the selection of all the five regional hospitals in the province to participate in the study. They were chosen based on the judgment that they act as referral hospitals for all the district hospitals. All five regional hospitals in Limpopo Province were sampled to participate in the study.

3.5.1.2 Sampling of hospital wards

The general wards are the medicals, surgical and paediatric wards. They were purposively selected based on the admissions of many patients with complicated conditions, coming as referrals from district hospitals. Thus, the patients remain in the wards for a prolonged period before they are discharged.

3.5.1.3 Sampling of the respondents

A non-probability purposive sampling technique was used to select professional nurses who are known to be knowledgeable about the implementation of the nursing process. This assisted in achieving the purpose and objectives of the study (de Vos *et al*, 2011). According to Palinkas, Horwitz, Green, Wisdom, and Duan (2015), when using purposive sampling various strategies can be used.

The study followed both the homogenous and criterion purposive sampling strategies where 18 professional nurses were selected. Homogenous purposive sampling was utilised, because the researcher required the participants who share the same characteristics that will assist them to share their practices concerning the implementation of the nursing process in patient care. Additionally, in promoting the provision of quality patient care in their setting. The researcher obtained information-rich data on the practices of professional nurses concerning the implementation of the nursing process in patient care (Grove *et al*, 2013).

Criterion purposive sampling was used because all the selected participants met the important predetermined inclusion and exclusion criterion. However, for them to participate in the study, it is appropriate as the study is an implementation type of research. The sample size for the qualitative strand was not predetermined but was determined by data saturation where there was no new information emerging (Polit & Beck, 2012; de Vos *et al*, 2011). Most importantly, the professional nurses working in general wards i.e. medical, surgical, and paediatric wards of the five regional hospitals, who meet the criteria constituted the sample of the study. The participants distribution per hospital were as follows: five participants from Tshilidzini, four from Letaba, three from

Mokopane, four from St Ritas and two from Philadelphia hospital and working in the medica, surgical and paediatric wards.

3.5.2 Sampling criteria

According to Polit and Beck (2008), there is a criterion for inclusion and exclusion when sampling participants for the study.

3.5.2.1 Inclusion criteria

The following are inclusion criteria to determined professional nurses who participates in the study:

- The participant is ought to be a professional nurse in the general wards of the selected regional hospital.
- Having one-year experience or more in supervising and implementing the nursing process and has consented to participate in the study.
- Has undergone education and training through SANC Regulation 425 or Regulation 683.
- Should be supervising and implementing the nursing process in the identified general wards of the selected regional public hospitals.

3.5.2.2 Exclusion criteria

All professional nurses who do not meet the basic aspects for consideration of inclusion by the researcher were excluded from participating in the interview sessions. The researcher took note of the following exclusion criteria during the study to avoid including participants who do not meet the stated prerequisites needed to participate in the study.

- Those professional nurses with less than one-year experience in the post and not supervising in implementing the nursing process were excluded.
- Professional nurses who are not working in the general wards of the selected public regional hospitals were not included in the study.

3.5.3 Pilot study

A pilot study is a mini-study conducted to test a small portion of the study before the main study is undertaken (Joubert & Ehrlich, 2012). For this study, a pilot study was conducted before the main study at Siloam Hospital, and the hospital was not included in the main

study to identify the vagueness of the interview guide, and to make improvements. The pilot study also assisted the researcher to verify whether the questions in the interview guide answer the objectives of the study. Five participants were purposively selected and interviewed. The researcher then made improvements in the interview guide.

The researcher made arrangements with the hospital beforehand. The researcher went to the hospital to select those participants who meet the sampling criteria, to be included in the semi-structured, one-on-one interview sessions. The results of the pilot testing were positive. However, some amendments were done on the interview guide which include the rephrasing of the main question from “How do you practice the nursing process in your ward?” into “How do you implement the nursing process in your ward?”. The probing question number one was on the documentation of the nursing process. This was removed because it is covered in the answers for implementation of the nursing process. The researcher then went into the field, and collected data for the main study. One article has already been published from the qualitative pilot study results in an accredited international journal.

3.5.4 Data collection

Data collection is a technique used by the researcher to collect information from the participants to determine each participant's facts and opinions (de Vos *et al*, 2011). Data were collected from 18 participants using a semi-structured one-on-one interview with an interview guide. Accordingly, exploration of the practices and training needs of professional nurses who are implementing the nursing process in the public hospitals were investigated over four months until data saturation. Data saturation was reached in three regional hospitals but the researcher continued with interviews on the other remaining two regional hospitals to include all regional hospitals in the Limpopo Province. The responses to the questions were followed by a probing question to stimulate information about the phenomenon under study. Participants were audio-taped and field notes were also taken to track all shared information followed by verbatim transcriptions of the recordings.

- *Data collection preparation*

The researcher after receiving permission to conduct the study in the five regional hospitals, started by contacting the hospital nursing managers, to establish a relationship, to also discuss the involvement of the participants in the interview sessions. Thus, to inform the management about the planned dates for data collection. Furthermore, the permission to approach the units and the professional nurses was granted by the hospital management of the selected hospitals (Rubin & Babbie, 2010). The researcher introduced herself to the operational nurse managers and requested to speak to the unit professional nurses. This was carried out because they were the target population of the sample. Eighteen professional nurses in the different wards who met the selection criteria, and who gave consent to participate were included in the interview sessions.

A room free of interruptions was prepared in each hospital for the interviews to ensure that privacy was maintained. Data were collected in the natural ward setting where participants are implementing the nursing process. Participants were kept informed about the purpose and objectives of the study. The researcher sought a signed consent form from the participants for permission to conduct the interview, the use of an audio tape recorder, and taking of field notes which were also reflected in the recordings. The participant's anonymity ensured by giving assurance to participants that they will be interviewed individually and in private. The participants were further reassured that their identity will not be revealed at any time during the interview (Brink *et al*, 2012).

- *Methods of data collection*

The researcher used triangulation in data collection whereby a semi-structured one-on-one interview using an interview guide, along with an audio tape recorder. Field notes to track all shared information followed by verbatim transcriptions of the recordings. According to Moule and Goodman (2014), triangulation in data collection implies using various methods and tools to collect data to overcome potential biases of using a single data collection method and tool. Semi-structured individual interviews were aimed at concluding the picture of how the participants understood their life-world at a personal level. The interview was aimed at gaining an in-depth understanding of the participants' life-world concerning their practices in implementing the nursing process. The researcher

wanted to collect the rich, deep description of the research participants' experiences from their perspective. The following data collecting methods and tools were used to obtain information from participants:

3.5.4.1 Semi-structured interviews

An interview is a method of collecting data where an interviewer obtains responses from participants during a face-to-face encounter (Brink *et al*, 2012). Nevertheless, to obtain a detailed picture of a participant's practices and knowledge while implementing the nursing process in the context of this study, a one semi-structured the one-on-one interview was used to collect data from participants (Brink *et al*, 2012). Semi-structured one-on-one interviews with an interview guide are open-ended interviews during which a researcher is guided by a list of specific topics to address (Polit & Beck, 2010).

An interview guide is a set of pre-determined open-ended questions to guide the interview with questions that are limited to between three and six (Botma *et al.*, 2010). The researcher asked all the participants questions from the interview guide in the same manner. The researcher started by giving the participants the information leaflet and consent form to sign and then asked a series of questions from the interview guide. The researcher employed the communication techniques as outlined in De Vos, Strydom, Fouché & Delpont (2011) during the interviews as follows:

- *Paraphrasing*

Paraphrasing is a verbal response where the researcher tries to rephrase what the participant has said differently, while the meaning remains the same seek more information (de Vos *et al*, 2011). The researcher repeated some of the participants' words in another arrangement but with the same meaning to verify whether she understood what the participants had said.

- *Clarification*

According to de Vos *et al*, (2011), clarification is used to get clarity on statements that are not clear. The researcher asked the follow-up questions, repeated the participant's statement, and redesigned the questioning throughout the interview so that the participants could clarify facts and consolidate some of the information. The researcher

used statements like “*are you saying*” to try and clarify vague statements that the participants had provided.

- *Probing*

A probe is a neutral request to clarify an ambiguous and incomplete question, finish an unfinished question, or complete incomplete answers (de Vos *et al*, 2011). Different probing questions were asked, triggered by the answer from the participant’s answers to allow the participant to give more and clearer information. Probing was used to excavate the response of questions to increase the richness of the data obtained, and this technique persuaded the participants to give more information. The researcher used a special probing methods, for example, the researcher contradicted the information provided by a participant by deliberately stating the opposite to what a participant had said, to stimulate further comments and clarity. The researcher also complimented the participants to encourage them to continue sharing their opinions (de Vos *et al*, 2011). At the end of an interview session, participants were allowed to ask questions.

- *Minimal Verbal Responding*

According to de Vos *et al*, (2011), minimal verbal responding is a response evidenced by occasional nodding that confirms to the participant that the researcher is still listening. The researcher at times was nodding her head to show that she was listening attentively to what the participant was saying. In this study, the researcher nodded the head, verbalising “ok”, “*I understand*”, “mm”, “yes”, “continue,” in response to what the participant was saying and this encouraged the participant to provide more information.

- *Focusing*

Focusing is when the researcher keeps the interview on track (de Vos *et al*, 2011). The researcher ensures that full attention was given throughout to help the participants to focus on their practices related to the implementation of the nursing process.

- *Encouragement*

According to de Vos *et al*, (2011), participants are encouraged to follow a specific line of thought and encouraged to elaborate about the aspects related to the implementation of

the nursing process. The researcher encouraged the participants to elaborate on a specific aspect by asking the participant to say more like “*Can you tell me more?*”

- *Reflective summary*

Reflecting occurs when the researcher reflects on something that the participant had already said so that the participant can give more information on that point (de Vos *et al*, (2011). In this study, the researcher draws back the participants to the answers already given so that the participant could expand more. The researcher summarised the ideas of the participants to determine whether the participants understood what they had said and to stimulate the participants to add more.

- *The use of silence*

Silence allows the participant to talk while the researcher is listening attentively and observing any non-verbal cues (de Vos *et al*, 2011). The researcher revealed this by pausing or having a quiet moment while observing the interaction of the interview. This allowed the participant to think and continue narrating at her own pace without any interruptions.

- *Validation*

The researcher observed the participants and interpreted their non-verbal communication such as yawning, facial expressions, bodily gestures, and transcribed them for analysis. The researcher also asked for clarity on the observations made to analyses them correctly (de Vos *et al*, 2011). All non-verbal communications observed during interviews were transcribed and analysed to generate relevant meaning.

3.5.4.2 Voice recorder

Voice recording of the semi-structured, one-on-one interview was done to support the subsequent analysis. It was followed by transcribing the recordings verbatim (Moule & Goodman, 2009). The researcher was able to concentrate on the conversation of the interview by making use of a voice recorder. The participants gave consent from for audio-taping of the interview proceedings at the start of the interviews. The researcher created a special file which shows the number of the interview session and participants’ names

were not mentioned in identifying the files. The participants' names were never reflected during the recordings to safeguard their identity and for the maintenance of confidentiality. Backup of the interview sessions was ensured by transferring the recordings to the researcher's laptop and a hard drive which is password protected.

According to De Vos *et al*, (2011), a voice recorder is more advantageous than notes during an interview session because it allows all the information to be instantly recorded and allows the researcher to concentrate on the interview and what to ask next. The audio recorded information was transcribed verbatim. The researcher had a chance to immerse herself in the data to acquire a deeper insight into the phenomenon through the process of transcribing the information.

3.5.4.3 Field notes

According to Polit and Beck (2012); Botma *et al*, (2010), explains field notes as notes that are written by the researcher to be described as unstructured observations that were made on the participant during interviews. Field notes included comprehensive accounts by the participants, the events taking place, discussions, communication, the researcher's attitude, perceptions, and feelings (de Vos *et al*, 2011). Brief field notes of the semi-structured individual interview session were written as closely as possible after observation of non-verbal cues. Although, it was limited to minimise interruptions during the interview session. Field notes are important during the data collection sessions for the study, because it resulted in the fact that no information was lost. During the data collection, field notes were taken to capture all non-verbal cues that voice recorders could not capture and these were incorporated and reflected in the transcribed data.

The researcher wrote detailed notes immediately after each interview session. During the interview session the researcher had to listen attentively to the participants' descriptions to come up with probing questions. In this study, field notes were written to describe the professional nurses in the observed setting which includes the manner of speaking, physical appearance, style of interacting, and any other aspect that can be used to provide a better insight into the study.

3.5.5 Data analysis

Polit and Beck (2008) define data analysis as a systemic way of organising and producing research data. Data collected through interviews will be analysed using Tesch's open coding method where themes and sub-themes are developed.

Below are Tesch's eight steps of data analysis as described in Creswell (2009).

- The researcher read through transcriptions and then continued to write ideas to get a sense of the whole interview session;
- The researcher started with the most interesting and shortest interview, taking into consideration the underlying meaning of information while writing views in the margins;
- The researcher then made a list of all topics, related topics clustered together and topics were used to form columns that will be arranged in main and unique topics;
- The researcher took the list back to abbreviate the topics as codes, writing the codes next to the relevant segment of the text, which will then assist the researcher to identify whether new categories and codes develop;
- The researcher identifies the most descriptive phrasing for the topics and turn them into categories;
- The researcher made abbreviations for each category and will arrange the codes in alphabetical order;
- The researcher made an introductory analysis by collecting the data material belonging to each category in one place; and
- The researcher then records the existing data.

The researcher made a summary of the themes and sub-themes developed and then the raw data sent to an independent coder for coding. An experienced independent coder in qualitative research was approached to analyse the verbatim transcripts. The independent coder had co-coded many raw qualitative research data and holds a doctoral degree in nursing science and is still supervising masters and doctoral nursing students. The consensus was reached between the researcher and independent coder concerning the themes and sub-themes that were identified independently.

3.5.6 Measures to ensure trustworthiness

Trustworthiness refers to the extent of assurance qualitative researchers need in their data (Polit & Beck, 2008). Criteria to ensure trustworthiness as outlined by Lincoln and Guba (de Vos *et al*, 2011) will be used to ensure the trustworthiness of the study.

- *Credibility*

Credibility refers to the assurance in the truth of the data and interpretation thereof (Brink *et al*, 2012). In this study, credibility was ensured through prolonged engagement during the semi-structured individual interview, where an extended period was spent with participants for four months until data saturation was achieved. The researcher spent enough time interviewing the participants. The interview lasted for about 30 to 45 minutes exploring and giving participants a chance to describe their practices during the implementation of the nursing process. Peer review in the form of presentation to the provincial research team was done, and comments were provided to enhance the credibility of the study.

The researcher visited the participants before the interview sessions, to make pre-arrangements and ensure a briefing session is conducted before the real interview. The researcher therefore, conducted a one-one interview with the participants until data is saturated. During the interview session, field notes were taken and a qualified experienced supervisor was consulted. The researcher asked questions that made the interaction to be active between the participants and the researcher. The questions were followed by probing questions to get in-depth information. The researcher involved an independent coder and a meeting was convened to discuss the themes, sub-themes identified independently, and a consensus was reached. The researcher was supervised by two qualified professors from the University of Limpopo, who are experts in quantitative and quantitative research.

- *Transferability.*

According to Botma *et al*, (2010) transferability focuses on the degree to which the research method in use applies to different contexts, groups and produces the same results. The researcher collected adequate and detailed data from nurses in their real

settings at regional hospitals of Limpopo province. The findings were limited to only regional hospitals and not to all other hospitals that are found in the Limpopo province.

The researcher used a homogenous purposive sampling method to collect data from professional nurses who were implementing the nursing process in patient care within the context of the regional hospitals. The researcher used the semi-structured, one-on-one interviews using an interview guide. In this study, the researcher further ensured transferability through a clear description of the qualitative research methodology in use which includes research design, population, sampling method, sample size, data collection method, and analysis of data.

- *Dependability*

Dependability is based on the idea as to whether research findings will be secure if the inquiry is duplicated with the same participants and similar context (Botma *et al*, 2010). Dependability was achieved by outlining a thorough and detailed methodology as explained in this chapter. Therefore, the triangulation in data collection were found by recording data in a voice recorder, field notes supported by verbal response during the interviews. The audio-taped and field notes responses and raw data of each interview were kept under lock, They were keyed and safe as part of the audit trail. An experienced independent coder not taking part in the study was given the raw data and field notes to performs independent coding of the collected data and a consensus was reached with the researcher for the final themes and sub-themes.

- *Confirmability*

Confirmability is the degree to that the findings are an undertaking solely of the participants and conditions of the research and no other biases (Botma *et al*, 2010). Confirmability was attained by a proper description of the methodology used, minimising the researcher's biases in the study and through bracketing. In this study, "bracketing" was used by the researcher through identification also setting aside preconceived thoughts and beliefs about the phenomenon under study.

The researcher used an interview guide that was aimed at achieving the objectives of the study. The tape-recorded information, written consent forms, field notes, and transcripts

were also kept as proof that the study was undertaken by the researcher. Triangulation of data collection methods was used through the use of voice recorder and written field notes which were further supported by verbal responses of participants during the semi-structured individual interviews. Table 3.1 below represent the summary of measures to ensure trustworthines of the study.

Table 3.1: Summary of the measures for ensuring trustworthiness

Strategy	Measure	Application of activities to ensure trustworthiness
Credibility	Prolonged engagement	The researcher collected data for four months during December 2017, June, July, and October 2018 until data saturation was reached. Each interview session lasted for about 30 to 45 minutes
	Triangulation	The researcher used triangulation in the data collection by using a voice recorder, observation of non-verbal cues, and taking of field notes. The researcher used different theories, and a Six survey list of the Practice-Oriented Theory by Dickoff et al. (1968) and Malcolm Knowles' adult learning theory.
	Debriefing session	The researcher visited the participants before the real interview session to make pre-arrangements briefing session.

Strategy	Measure	Application of activities to ensure trustworthiness
	Interview technique	The researcher conducted semi-structured individual interview sessions relevant to this research project.
	Independent coding	The researcher had a meeting with an independent coder to discuss the themes and sub-themes identified independently and an agreement was reached.
	Peer scrutiny	The researcher presented the research to peers and research team members to a Limpopo provincial department.
Transferability	Purposive sampling	A homogenous purposive sampling method was used in this study for the inclusion of professional nurses implementing the nursing process.
	Thick description	Thick description of the methodology described
	Period of data collection and length of sessions.	Period of data collected over four months and individual interviews lasted for 30 to 45 minutes.
Dependability	Thick description of research methods	A detailed methodology was outlined.
	Triangulation	The researcher used a voice recorder and field notes in the collection of data
	Audit trail	The recordings, field notes kept safe under lock and key, and recording transferred to a laptop which is password protected.

Strategy	Measure	Application of activities to ensure trustworthiness
	Independent coding	Independent themes identified by the researcher during data analysis and an agreement was reached with an independent coder on identified themes and sub-themes.
Confirmability	Thick description of research method	The researcher provided an in-depth methodological description of the methodology used.
	Minimising bias	The researcher used bracketing to minimise bias throughout the research project.
	Audit trail	The researcher kept tape-recorded information, written consent forms, field notes, and transcripts.
	Independent coding	An independent coder with experience in qualitative data analysis was used.

3.6 THE QUANTITATIVE STRAND OF THE STUDY

Polit and Beck (2008), explain that a quantitative approach in research is aimed at using a general set of well-planned and controlled procedures to collect information. Additionally, Polit and Beck (2008) further indicated that in quantitative research, the evidence is generated based on the specified plan, using recognised instruments such as questionnaires to collect the needed information and the collected data is numerical and is analysed using statistical procedures.

3.6.1 Sampling and sample size

In this quantitative strand, the sampling size was pre-determined before the study was undertaken (Botma *et al*, 2010). All professional nurses in both the five regional hospitals of Limpopo Province were 973 (LDoH, 2017). The sample size was calculated using Taro

Yamane formula as outlined by the Department of Sociology and Criminal Justice (2017) and was calculated as follows: $n = N \div 1 + N (e)^2 = 973 \div 1 + 973 (0.05)^2 = 283$ where n = sample size, N = population size and e = sampling error at 5%. The sample size was therefore 283. The sample size was distributed proportionally to the size of the population per hospital as shown in table 3.2 below.

Table 3.2: Population frame

Name of the regional hospitals	Number of professional nurses	Sample size
Letaba	219	64
Mokopane	134	39
Philadelphia	173	50
St Ritas	145	42
Tshilidzini	302	88
	973	283

3.6.2 Sampling procedure

The researcher used a probability random sampling method to select respondents for the quantitative strand. This is a selection process where each element of the population has an equal, independent chance of being selected in the sample (Polit & Beck, 2008). The duty roster was used to identify professional nurses in each general ward of the regional hospitals. Professional nurses who were on duty during the sampling period were randomly selected using a systemic technique. According to Polit and Beck (2012), the sampling interval which is the standard distance between sampled elements was calculated as follows: $k = N \div n$, where k is the sampling interval, N =total population, and n the sample number therefore $k = 973 \div 283 = 3.4$. Therefore, the sampling interval in this study is three. The researcher then chooses a random starting point from the list of names from the duty roster and thereafter every third name was selected until the sample size was reached.

3.6.3 Pilot study

According to de Vos *et al*, (2011), a pilot study is a small scale conducted before the main study, the aim was to check whether the instrument is adequate and apt to be used for the main study. The rationale to conduct a pilot study was to investigate the practicability of the main study, to detect the possible errors of data collection instruments, pitfalls that could have been encountered before the study and to ascertain the questionnaire answers the objectives to refine the data collection instruments (Brink *et al*, 2012). The pilot study was also done to check for face and content validity of the data collecting instrument.

A pilot study is essential in research because de Vos *et al*, (2011) maintain that researchers should not start the main inquiry unless confident that it is reliable, effective, and free from errors. The pilot study questionnaire was first given to the statisticians, who remarked that all the questions should be answered. This is to enable the results to be put in a numerical order, percentages, the columns that strongly agree, and strongly disagree are removed in the questionnaire to remain with agree, neutral and disagree columns.

A pilot study was conducted at Siloam Hospital. Where ten respondents who constituted 10% of the pilot study population were given self-administered questionnaires to answer on their own. This was done in the presence of the researcher to clarify any misunderstanding. The pilot hospital was not part of the hospitals used in the main study. The participants were required to respond by making a cross in the appropriate field on the questionnaire. The questionnaire was improved based on the outcomes of the pilot study as follows: in section C which focuses on the training needs assessment, question C1 up to C4 were added to gain more information on training on the nursing process, in-service training, attendance of workshops, and competency level when implementing the nursing process. Question C1 was moved to be in question C5 while question C6 was added to gain more information on whether there is a formal training programme available in the hospital. Question C2 was changed and moved to question C7, question C3 was removed because it was having same answers with question C2. Question C8 was inserted to get information about management support to nurses when implementing the

nursing process whereas question C4 was removed as it did not give information to answer the research question. It was then replaced by question C9 requiring information on the workshop attendance and was rephrased to make more meaning. Pre-testing the questionnaire was helpful, because ambiguous questions were corrected like question C4 which was talking about computer literacy in the nursing process. This was done before the commencement of the main study, with one article already published.

3.6.4 Data collection

Data were collected using a self-administered close-ended questionnaire adopted from Mahmoud and Bayoumy (2014). A self-administered questionnaire was distributed to the participant, to complete on her/his own, in the presence of the researcher to address the problems which may be experienced (de Vos *et al*, 2011). In this study, the questionnaire, was pilot-tested before it was utilised in the main data collection (de Vos *et al*, 2011). The advantage of using a questionnaire is that the researcher can gather data from a large number of respondents in a relatively short space of time. Questionnaires are less expensive compared to other methods. Thus, it usually provides greater reassurance of anonymity. Although, it does not give a chance for probing and clarification. The questionnaires were only in English, because the respondents are qualified professional nurses.

The instrument had three sections: Section A, the demographic information with five questions, including gender, age, educational qualification, years of employment in the profession, and years of implementing the nursing process. Section B with 17 questions on practices of nursing during the implementation of the steps of the nursing process and Section C with 11 questions on an assessment of training needs for professional nurses implementing the nursing process. The respondents were given 30 to 45 minutes to complete the questionnaire on their own, but the researcher was available in case any problem arises (de Vos *et al*, 2011).

3.6.5 Data analysis

Burns and Grove (2009) outline data analysis as the reduction, organising, and giving meaning to collected data. Quantitative data were analysed using Statistical Package for

Social Sciences (SPSS) version 23 with the assistance of a Biostatistician. Descriptive statistics were used to describe and analyse raw data collected quantitatively through questionnaires. According to Botma *et al*, (2010), there are various significance statistical tests that can be used during the analysis of quantitative data. The analysed data were then organised, summarised, and presented through frequency distribution tables, percentages, and graphs.

3.6.6 Validity and reliability

The validity and reliability are important determinants of the quality of a research instrument and are outlined in detail below.

- Validity

Validity is explained as the accuracy, authenticity, and genuineness of the data collecting instrument (de Vos *et al*, 2011). Validity was ensured by making sure that the questionnaires measure aspects of the phenomenon under study and by taking a questionnaire to be reviewed by peers, and the supervisor before data collection.

Face validity

Face validity is when a particular empirical measure may or may not conform to common agreements concerning a particular concept (Polit & Beck, 2008). Face validity was ensured by giving the questionnaire to supervisors, peers, and biostatisticians to review before piloting with the instrument. This exercise has assisted the researcher to determine the readability and simplicity of the content.

Content validity

Content validity is the degree at which the instrument has an appropriate number of items for the aspect being measured and adequately covers the aspect domain (Polit & Beck, 2008). Content validity of an instrument is concerned with issues of whether the major subjects of the phenomena being measured are incorporated into the instrument. Content validity was ensured through literature review and by giving the questionnaire to the supervisor and biostatistician to check if the instrument will cover all aspects under study.

Construct validity

Construct validity is defined as the degree at which the measurement questions measure the existence of those variables one intends to measure (Saunders *et al*, 2009). Construct validity was ensured by making sure that different kinds of meanings are relevant to the participants in their natural environment. Thus, by grounding the measures in a wide literature search that outlines meanings of the construct and its elements.

- Reliability

Reliability refers to the dependable, consistent, stable, and trustworthiness of the data collecting instrument wherein the instrument would measure the same thing more than once and still yields the same results (de Vos *et al*, 2011). Reliability is the consistency with which the research instruments measure the intended aspects (Polit & Beck, 2008). Reliability was achieved by using structured questionnaires where all respondents will answer the same questions and by pretesting of the questionnaire to evaluate if the questionnaire is clear and concise before using it in the main study. The researcher also conducted a pilot study to evaluate the clarity of the instructions given to respondents to complete the questionnaires.

3.7 BIAS

Brink *et al*, (2012) explain bias as an influence that yields an error or distortion which can affect the quality of evidence both in the qualitative and quantitative research study. Bias can occur in any step of the research process. However, it was prevented by using a comprehensive systemic sampling method to select the respondents from the target population for the quantitative strand. The researcher purposively selected all five regional hospitals in the province as they receive transfers from district hospitals. The researcher used purposive sampling to select the participants who meet the inclusion criteria, to participate in the qualitative strand of the study. Bias was further prevented through bracketing where preconceived ideas, and knowledge of the researcher on phenomenon were put aside as they would have influenced the interview.

3.8 MERGING AND INTERPRETATION OF RESULTS

When the two sets of results are available, the researcher then comes to a point of merging the results to compare those results. The researcher then interprets the results

trying to verify the extent at which the two sets of results converged, diverged, and relate to each other. The merging of the results enabled the researcher to derive a clear understanding in answering the overall aim of the study. When the researcher was using this design, it was possible to collect two different but complementary data on the same topic through both quantitative and qualitative techniques with equal priority (Creswell & Plano-Clark, 2011).

3.9 RESEARCH METHODOLOGY AND PHASES OF THE STUDY

The study was conducted in phases as indicated in figure 1.3. The explanation of the methodology in each phase is outlined as follows:

3.9.1 Phase 1: Situational analysis

This phase dealt with the first and second objectives of the study. A mixed-method convergent parallel design was employed to fulfill these objectives (Creswell, 2014). The data were collected simultaneously using both the qualitative and quantitative approaches. Semi-structured one to one face interview was done using an interview guide to collect qualitative data. While a closed-ended, self-administered questionnaire was used to collect quantitative data. Tesch's open coding was adopted to analyse qualitative data. In quantitative data, the data is analysed using SPSS version 24. Merging of the two results is done to make comparisons and interpretations of the findings.

3.9.2 Phase 2: Description of the theoretical framework

This phase dealt with the third objective of the study. This phase utilised the activities outlined by Dickoff, James, and Wiedenbach (1968) in the Practice Orientated theory to support the development of an educational programme aimed at improving implementation of the nursing process in public hospitals in the Limpopo Province. The six vital points to survey, correspond with the six questions about an activity supporting the theory will serve as a directive for the theoretical framework.

3.9.3 Phase 3: Development of a training programme

This phase dealt with the fourth objective of the study. A training programme is developed based on the situational analysis results analysis in Phase one. The development of the

training programme was guided by the reviewed literature and the legislative framework using Dickoff, James, and Wiedenbach's Practice Orientated theory.

3.9.4 Phase 4: Implementation of the training programme

This phase deals with the fifth objective of the study whereby the implementation of the programme occurred. The researcher has conducted a two-day workshop to in-service professional nurses on the nursing process and its practical implementation when caring for patients. The researcher as the facilitator developed a schedule for the implementation of the educational programme. This was done by drawing up a plan for dates in which the educational programme can be conducted. The researcher has requested permission from hospital managers to conduct such workshops at own expense.

3.10 ETHICAL CONSIDERATIONS

Ethics is the study of norms and values within a group that direct and provide judgments of what is right or wrong in human behaviour (Mellish, Oosthuizen & Paton, 2010). Polit and Beck (2008) also describe ethics as a system of moral values concerning the degree at which the research procedures observe, follow professional, legal, and social obligations of the participants. Ethical principles were considered and adhered to in both the quantitative and qualitative strands.

- *Ethical clearance*

An ethical clearance to conduct the study was obtained from the Turfloop Research Ethics Committee (TREC) with project number (TREC/264/2017: PG)

- *Permission to conduct research*

Permission to conduct the research was obtained from the Limpopo Provincial Ethical Research Committee, District Executive managers, and Chief Executive Officers (CEO) of different regional hospitals and the nursing management of the relevant hospitals.

- *Informed consent*

Informed consent means that participants have sufficient information regarding the research, hence, they were capable of giving informed consent (Polit & Beck, 2008). All

the participants were expected to give informed consent after all possible information on the goal of the investigation. The procedures to be followed during the investigation and possible advantages were explained to the participants. The audio-recording, and note-taking during the interview were confirmed on the tape recorder.

- *Voluntary participation*

Participants were allowed to withdraw from participating at any time if they feel they cannot continue without fear of being victimised (Polit & Beck, 2008). Voluntary participation was ensured by giving full information to participants and that participation will be voluntary after the purpose of the study is explained. Respondents completed the questionnaire voluntarily.

- *Confidentiality and anonymity*

Confidentiality entails that individuals' identity of participants was not to be linked to the information they have provided. For this reason, no information was going to be publicly divulged (LoBiondo-Wood & Harber, 2006). Confidentiality and anonymity were ensured because no information was disclosed to anyone who is not directly involved in the study. The participants' names were not be used on the questionnaires and interviews but they were be allocated codes.

- *Principle of non-maleficence*

According to Mellish, Oosthuizen, and Paton (2010), maleficence means harmful and this principle of non-maleficence refers to not harming and the principle requires researchers not to harm the participants. The principle of non-maleficence was ensured by considering that no practice oppose the welfare of any research participant intentionally, through lack of knowledge or negligence.

- *Principle of beneficence*

According to de Vos *et al*, (2011), beneficence is an obligation to maximise the possible benefits while decreasing possible harm. The principle implies that participants will be attended to in a way that avoids any possible harm physically, or emotionally. The

researcher clarified the advantages of the study and how the findings can benefit the nursing profession.

3.11 CONCLUSION

This chapter introduced the mixed method convergent approach which was used in the study and the research design and approach were chosen based on the objectives of the study. The semi-structured interviews using an interview guide and questionnaire as data collecting instruments were described followed by, the outcomes of the pilot studies which were conducted. Ethical standards followed were described, measures to ensure trustworthiness, credibility, transferability, dependability, and confirmability, and how it was ensured. Issues of how to ensure validity and reliability were explained in this study. The researcher also indicated the study setting, how participants were selected, the data collection process and data analysis, and the avoidance of researcher bias during data collection and data discussion.

CHAPTER 4

PRESENTATION, INTERPRETATION, AND DISCUSSION OF FINDINGS

4.1 INTRODUCTION

The previous chapter discussed the research methodology that guided the study. Most significantly the study followed a mixed method convergent parallel design. The purpose of the study in both the qualitative and quantitative strands was explained to the participants, and respondents respectively. Both verbal and written consent were obtained from the participants and respondents before collecting data. The purpose of the study was to develop a training programme to improve the implementation of the nursing process in public hospitals in the Limpopo Province, South Africa. This chapter presents, interprets, and discusses the merged findings from both qualitative and quantitative strands. The individual semi-structured in-depth interviews were conducted with 18 participants and 242 respondents completed the questionnaires.

4.2 DATA ANALYSIS

The data collected during individual semi-structured in-depth interviews were analysed using eight steps of Tesch's open coding qualitative data analysis method with an independent coder as described by Creswell (2014). A consensus was reached between the researcher and the independent coder on final themes and sub-themes based on the ones which emerged when analysing independently. Table 1 depicts the final themes and sub-themes which serve as the findings of the study. Data collected through questionnaires were analysed using SPSS with the assistance of a Biostatistician.

4.3 RESEARCH METHODOLOGY APPROACH

Phase one of the study addressed both objectives one and two. The first objective was to explore and describe the practices of professional nurses when implementing the nursing process in public hospitals of Limpopo Province. The second objective was to assess the training needs of professional nurses when implementing the nursing process in public hospitals. A mixed-method concurrent approach where both qualitative and quantitative strands were used to achieve the first two objectives. The third objective was to describe a conceptual framework for the development and implementation of a training

programme for professional nurses implementing the nursing process in the public hospitals. The fourth objective was to develop a training programme and guidelines for professional nurses who are implementing the nursing process in public hospitals. The fifth objective was to implement, evaluate the training programme for professional nurses concerning the implementation of the nursing process in public hospitals.

4.4 PRESENTATION AND INTERPRETATION OF FINDINGS FOR QUALITATIVE STRAND

The findings are presented in a narrative format, hence prior the description of the findings is presented. Verbatim excerpts of the participants are presented and relevant literature to support the findings is described. The findings of this study are discussed based on the themes. The sub-themes that have emerged during data analysis based on the individual semi-structured interviews, conducted with 18 participants. The main objective of the chapter is to provide critical reasoning, presentation of the results to provide foundation on how participants implement the nursing process in public hospitals of Limpopo Province, South Africa, and the training needs they have concerning the nursing process.

4.4.1 Demographic profile of the participants

This section presents the report of the demographic information of the participants used in this study. The information comprises the gender, age, highest educational qualification, the period of employment into the post, and period of implementing the nursing process. The population of the study comprised of 18 professional nurses from all regional hospitals in the Limpopo Province, South Africa.

The demographic characteristics of participants show that the majority of participants were females 16 and males were only two. Thus, this shows that nursing is a predominately female-dominated profession in South Africa. Most of the participants were aged 40-49, followed by 50-59 years, then 30-39 years. The finding indicates that the majority of nurses are middle-aged between 40 to 49 years. Most of the professional nurses seven of them, hold a degree, followed by six with post basic nursing/honours degree and five hold a professional nursing diploma. There were no participants who hold either Masters or Doctoral qualifications.

In terms of their years of employment in the post, the findings highlighted that the majority of the participants were a total of 12 participants and they had 20-29 years working experience, 30-39 years working experience, were a total of four, 10-19 years working experience were a total of two participants. The findings demonstrated that regarding the period of implementing the nursing process to the majority of nurses. About 12 of them have between 20-29 years working experience in the field. Those who had 30-39 years working experience were only two. Therefore, those with 10-19 years working experience were only two as well. This suggests that most of the professional nurses who participated in this study were experienced in the implementation of the nursing process.

4.4.2 Themes and sub-themes emerged during data analysis

Themes and sub-themes reflecting practices of nurses and assessment of training needs during the implementation of the nursing process are discussed as follows:

Five themes and sub-themes have emerged during the data analysis of research findings on the practices and the assessment of the training needs of professional nurses, when implementing the nursing process in public hospitals in the Limpopo Province. The main themes developed are, the implementation of the nursing process during care provision in the hospital wards. The challenges experienced during implementation of the nursing process steps. The suggested solutions for improvement of the implementation of the nursing process. Descriptions related to recording and strategies used by nurses to improve implementation of the nursing process. The summary of themes and sub-themes which emerged are presented in table 4.1 below:

Table 4.1: Themes and sub-themes

MAIN THEMES	SUB-THEMES
1. Implementation of the nursing process during care provision in the hospital wards	1.1 Description of the activities executed during initial contact with patients or including relatives. 1.2 Existing nursing team and their roles involved in the implementation of the nursing process described.

	<p>1.3 The importance of the steps for the formulation of nursing diagnosis based on identified problems described.</p> <p>1.4 The steps followed during the implementation of the nursing process described and care activities related to problems identified.</p> <p>1.5 The audit training and activities geared towards monitoring the implementation of the nursing process.</p> <p>1.6 An indication that health education part of the nursing process is outlined.</p>
<p>2. Challenges experienced during the implementation of the nursing process steps</p>	<p>2.1 Lack of skills related to the formulation of the nursing diagnosis resulting from limited knowledge described.</p> <p>2.2 The circumstances related to the lack of patients' honesty and health status lead described.</p> <p>2.3 Several gaps during the implementation of the the nursing process outlined.</p> <p>2.4 Assessment, planning, implementation, evaluation and recording steps viewed as problematic based on several factors.</p> <p>2.5 Lack versus limited training related to the implementation of the nursing process steps.</p> <p>2.6 Lack of material and human resources blamed for poor implementation of the nursing process.</p> <p>2.7 Lack of consistency during the implementation of the nursing process identified amongst the nurses.</p> <p>2.8 Lack of support from management to nurses implementing the nursing process.</p>
<p>3. Descriptions related to the recording during</p>	<p>3.1 Recording of executed activities viewed as important.</p>

<p>the implementation of the nursing process steps</p>	<p>3.2 Explanations of the processes which should be recorded outlined.</p> <p>3.3 Importance of recording during the implementation of the nursing process steps outlined.</p> <p>3.4 Lack of consistent recording in the patients' files based on several factors.</p>
<p>4. Strategies used by nurses to the quality implementation of the nursing process steps</p>	<p>4.1 Provision of support towards effective implementation of the nursing process steps.</p> <p>4.2 Clear lines of communication and implemented strategy towards the support of nurses.</p> <p>4.3 Lower categories of nurses restricted to execute some nursing process steps to ensure quality.</p>
<p>5. Suggested solutions for improvement of the implementation of the nursing process steps</p>	<p>5.1 Training programme viewed as a strategy for the improvement of the nursing process.</p> <p>5.2 The content of the training programme and reasons thereof suggested.</p> <p>5.3 Importance of introduction of teaching sessions in the wards was raised.</p> <p>5.4 Importance of including all categories of nurses in the training was outlined.</p>

4.4.2.1 THEME 1: IMPLEMENTATION OF THE NURSING PROCESS DURING CARE PROVISION IN THE HOSPITAL WARD

The findings pointed out that there is a variety of activities performed when implementing the nursing process during care provision in the hospital wards. This was evident in the following sub-themes that have emerged from this theme:

Sub-themes

1.1 Description of activities executed during initial contact with patients and or including relatives.

- 1.2 Existing nursing team and their roles involved in the implementation of the nursing process described.
- 1.3 The importance and steps for the formulation of nursing diagnosis based on identified problems described.
- 1.4 Steps followed during the implementation of the nursing care activities described and related to problems were identified.
- 1.5 Existence of audit training and activities geared towards monitoring implementation of the nursing process.
- 1.6 An indication that health education forms part of the nursing process was outlined.

Sub-theme 1.1: Description of activities executed during initial contact with patients and or including relatives

The findings of the study exposed that during initial contact with the patients and relatives the nurse performs the initial assessment of the patient which includes both subjective and objective assessments. During the subjective assessment, the nurse collects history from the patient and the family to formulate the nursing diagnosis. Objective data includes the use of instruments such as monitoring of vital data to confirm data collected subjectively. The nurse then groups similar symptoms to formulate a nursing diagnosis and potential nursing diagnosis, then plan the nursing actions to care for the patient.

Participant number 004 said: *"I'm going to check the condition of the patient. Um, let's say the patient...I'm going to take the history from the mother. Ja. I will formulate the nursing diagnosis and write a nursing care plan. I'm going to implement and then evaluate. If the problem, it's not solved I can re-plan again."*

The nurse prioritise care to be given to the patient, develop goals with realistic time frames. The nurse then implements the planned nursing intervention and evaluation of care given. The nurse re-plan care in case problems are not resolved.

The findings were confirmed by another participant number 002 *"We assess the patient, after assessment, we write the care plan. And in our assessment, we are supposed to*

have the nursing diagnoses , we plan the care and implement what we have planned and then we have to evaluate if the problem is resolved.”

Throughout the assessment process, the nurse has to do the recording of the subjective and objective findings, nursing diagnosis, planning, implementation, and evaluation in the different nursing process forms. This was confirmed by participant number 008 who alluded that: *“Actually, you fill the forms after assessing the patient and collecting the history, from the patient from head to toe, whatever. Some they can’t give the history that’s why we always rely on the relatives and then formulate a nursing diagnosis. After you assess and the observation, then you must do the nursing diagnosis, plan, implement, and evaluate.*

It therefore implies that the various activities employed by nurses when implementing the nursing process approach are interrelated to each other thus failure to do one activity affects other activities. This infers that multiple activities are done during the preliminary contact with patients.

Sub-theme 1.2: Existing nursing team and their roles in the implementation of the nursing process described

The study finding discovered that professional nurses, enrolled nurses, and enrolled nursing auxiliaries are involved in the implementation of the nursing process. They further indicated that each team member is assigned with different roles and responsibilities.

Participant number 002 said that *“After assessing the patient, the patient is supposed to be taken the vital signs, temperature, pulse, respiration, BP, and weight by the assistant nurses and enrolled nurses who assist the professional nurses. Sometimes when it is very busy in the ward they also assess patients and fill in the nursing process forms, but I must check their assessment and countersign.”*

The findings were also supported by participant number 004 who said that *“I will tell the junior nurse to come and admit the patient, and I’ll go to the drip room with the patient and insert the stopper and give medication. And then I will tell the staff nurse to come and*

give her a dose of oral medication. So, we work as a team with enrolled nurses and assistant nurses otherwise it will take me three hours for this admission”.

The other lower categories of nurses form part of the nursing process and together they work as a team. The professional nurse checks and countersigns any activities done by junior nurses. This was confirmed by participant 006 who indicated *that “Yes, yes, multidisciplinary team because when, like when you assess you take the history, and then you assess, that’s what we do holistically nursing. Usually, in a unit, we work together and assist each other.”*

The findings of the study suggest that team nursing is important when implementing the nursing process during patient care and that there be cooperation between the various categories of nurses. This implies that the professional nurse is the leader of the nursing care team and takes overall responsibility for the implementation of the nursing process.

Sub-theme 1.3 The importance of the formulation of the nursing diagnosis based on the identified problems described

The findings of the study revealed that the formulation of nursing diagnoses is an important step in the implementation of the nursing process. A nursing diagnosis is based on the identified problems concluded from objective and subjective assessments. The proper formulation of the nursing diagnosis enables the nurse to plan the care to be given to the patient. The study shows that nurses group similar symptoms together and identify the system affected, related factors. The evidence is the symptoms that the patient is presenting .

The findings were supported by participant 003 who said *“After doing the assessment, we then have to formulate the nursing diagnosis of the patient, not the medical diagnosis. This is very important so that you can be able to plan the care to be given to the patient. If you write a wrong nursing diagnosis, then the plan will not be right and you mismanage the patient.”*

Another participant 007 added *“Yes, the very, very important issue is the formulation of correct nursing diagnosis. These other things are not a serious problem, but the nursing diagnosis,”*

Participant 0013 also said that “From assessment, I will have the identified problems. What is the patient presenting with, the clinical picture that you see of the patient? It is a must to come and do your nursing diagnose to know what to plan and to plan correctly for the patient

The findings therefore, explicate that the correct formulation of the nursing diagnosis is important during the implementation of the nursing process. As it enables the nurse to plan to render the care effectively. Furthermore, the formulation of the nursing diagnosis is based on the problems that the nurse identifies during the assessment step.

Sub-theme 1.4: Steps followed during the implementation of the nursing care activities were described and related problems were identified.

The study findings illustrated that all the steps that are followed during the implementation of the nursing process. The activities which emanated from the problems identified during the assessment phase. The nurse assesses the patient subjectively and objectively and then formulates a nursing diagnosis, plan the care, then implement the planned care, evaluate the effectiveness of the care given and record in the patient’s file.

This was evidenced by participant number 005 who said” *I’m supposed to plan it depending on the problem that was identified on assessment and then implementation follows? Then I have to put them on paper, ne? And then plan for them. The patient is having pain, what must be done for pain is to give pain medication, it means I will give analgesics which is part of the implementation and then evaluate.”*

If the problems are not resolved re-planning is done. And all the activities that are carried out during the care of the patient depend on proper identification of the problems during the initial assessment and failure in one step affect the other steps thus steps are sequential.

Participant 007 also said *“I forgot to say something about the implementation before evaluation, we implement the plan. The plan is like you’re prescribing what must happen to this patient to address this problem that you identified. All activities implemented on the patient start from the identified problems, but poor communication may make one to miss some information, I mean communication skills.”*

Thus, the findings showed that initial assessment of a patient and identification of the patient's problems is important because all the other steps followed during nursing care are interdependent with each other. This means that failure to perform one step will affect the sequence of the other activities to be performed at various steps of implementing the nursing process.

Sub-theme 1.5 The existence of audit training and activities geared towards monitoring the implementation of the nursing process.

The study findings indicated that there are audit teams developed in the hospitals which are responsible for the monitoring of the quality of care rendered to the patients. The nurses assist in ensuring quality care is achieved. The participants confirm the study findings where participant 001 said *"No, we don't have a policy and even training on that nursing process, only audit people come and assist with nursing process challenges in the ward, the training programme is not there, we have never seen it here."*

This was again confirmed by participant 005 who said *"there is no monitoring that I can say, the only people who sometimes come are the audit people"*.

The findings further revealed that in the hospital they are trying to use audit teams to improve the implementation of the nursing process. Nonetheless, the effect is to a lesser extent without training. This was verbalised by participant 0014 who also said that *"No we don't have programmes. These people do not do much to assist us, the audit team is the one that is trying to follow-up the nursing process but there is not much progress."*

The finding therefore, implies that the hospitals have developed audit teams to assist with ensuring the promotion and monitoring of the nursing process implementation. However, their impact in improving implementation of the nursing process seems to be minimal, inconsistent, and are viewed as trying but not much effective.

Sub-theme 1.6 An indication that health education forming part of the nursing process outlined

The finding of the study noted that health education is important during the implementation of the nursing process. Health education is given to the patient and the

family on aspects recognised during the assessment of the patient and diagnosed as a knowledge deficit. Participant 003 confirmed by saying “*During assessments in case the patient has a problem of being obese, you must also start giving health education about the diet and exercise. Health education is important if you identify knowledge shortfall you must health educate the patient.*”

Another participant 0010 also added that” *If he’s on chronic medication, sometimes now the patient defaults treatment. In such cases of chronic condition, health education must be given to patients and family. The health education must also be included in the nursing process and must be recorded.*”

The findings point out that it is important to give health education to the patient and family based on identified needs when implementing the nursing process. The health education must be planned for, implemented, and recorded in the patient’s file.

4.4.2.2 THEME 2: CHALLENGES EXPERIENCED DURING THE IMPLEMENTATION OF THE NURSING PROCESS STEPS.

The findings of the study brought challenges which are linked to the implementation of the nursing process by the nurses in public hospitals. The challenges are further outlined in the following sub-themes.

Sub-themes

2.1 Lack of skill related to the formulation of the nursing diagnosis resulting from limited knowledge described.

2.2 Circumstances related to the lack of patients’ honesty and health status lead described.

2.3 Several gaps during the implementation of the nursing process assessment, planning, implementation, evaluation, and recording steps viewed as problematic based on several factors.

2.4 Assessment, planning, implementation, evaluation, and recording steps viewed as problematic based on several factors.

2.5 Lack versus limited training related implementation of the nursing process steps.

2.6 Inadequate material and human resources blamed for poor implementation of the nursing process.

2.7 Lack of consistency during the implementation of the nursing process identified amongst nurses.

2.8 Poor support from management to nurses implementing the nursing process.

Sub-theme 2.1: Lack of skill related to the formulation of the nursing diagnosis resulting from limited knowledge described

The study identified that there are challenges with the formulation of nursing diagnosis following initial assessment and reassessment of patients. There is a knowledge gap in the formulation of the nursing diagnosis which is viewed as a serious challenge during the implementation of the nursing process. Nurses lack skill and are not sure about how to formulate the correct nursing diagnosis. This, in turn, affects the quality of care rendered to the patients and this was supported by the following responses:

Participant 007 *“Yes, the very, very issue is the nursing diagnosis. These other things are not a serious problem, but the nursing diagnosis, it’s really giving us a headache, people do not have that skill to formulate nursing diagnosis (shaking head).”*

Participant 0011 also added that *“And then I come with the nursing diagnosis which to many of us is difficult to make. I can say 80% of nurses are not sure how to formulate the nursing diagnosis.”*

Participant 0015 *“Like nursing diagnosis, if you can get more like information on that nursing diagnosis formulation, that can be good, because there is other formulation of nursing diagnosis called NANDA and not this one of using a system. Basically, people do not understand this formulation of a nursing diagnosis.”*

The finding pointed out that nurses are not able to formulate nursing diagnoses after the assessment of patients due to a lack of knowledge and skill. This further shows that even those who are formulating the nursing diagnosis are not sure how it should be formulated. Accordingly, there is no uniformity also standardisation regarding the formulation of the nursing diagnosis in different hospital wards.

Sub-theme 2.2: Circumstances related to the lack of patients' honesty and health status lead described.

The findings of the study illuminated that there is usually a lack of honesty amongst some patients regarding their health history. This leads to incorrect nursing diagnosis and planning. Some patients are reluctant to give some information about their problems and they end-up providing wrong information. Thus, there is misleading information that the patients share with the nurses. Some patients may give wrong information due to various factors like fear of stigma if they divulge their sensitive information. This is the case particularly, if confidentiality and privacy issues are not explained to them when collecting the history from the patients.

This was evidenced by Participant 001 who stated” *The other challenges are that on admission the patient can give you a wrong history if there is no privacy during data collection. After 30 minutes or so, when we are looking to evaluate your patient, your patient gives you something. When the patient arrives here, he can be very ill, and they can give a wrong history.*”

Participant 003 also added” *The challenges of those patients who come without relatives sometimes they give a wrong history, afraid of giving confidential information and this affect how we treat them. It happens most of the time patients hide some sensitive information if you do not have the skill to assess thoroughly.*”

This finding implies that the failure of the nurse to adhere to ethical issues such as privacy and how confidentiality will be applied during the assessment of patients, lead to wrong information given by patients. Which later affects the quality of the care rendered. Thus, nurses need to be able to apply ethical principles during the assessment of their patients for them to can elicit correct information from the patients.

Sub-theme 2.3: Several gaps during the implementation of the nursing process steps viewed as problematic based on several factors.

The study again identifies that there is incomplete recording in patient's files during the implementation of the nursing process in patient care. The patient's files are having gaps

in both assessments, planning, implementation, and evaluation steps of the nursing process. The incomplete recording is associated with a variety of factors including a shortage of manpower, ignorance, and high patient volumes in the wards.

This was confirmed by participant 003 *“Ja, it is true recording is a serious challenge in the wards, people leave gaps in patients’ files. The problems mostly are seen are in assessment, nursing diagnosis, eh, and evaluation.”*

Another participant 005 *“Yes, we are to record everything but sometimes as a nurse you know we postpone saying I will record later due to workload, and time factor, you end up forgetting and go off for a long weekend. Sometimes it is due to ignorance or laziness, I don’t know”*

Furthermore, participant 007 *“The forms usually are having gaps and incomplete, nursing diagnosis and evaluation. But the evaluation needs to be written, the set timeframe has lapsed, you find that it’s always blank, but I blame the shortage of staff in the wards.”*

The finding denotes that there are record-keeping challenges amongst nurses during the implementation of the nursing process. Nurses’ records are incomplete from assessment, nursing diagnosis and evaluation and this is due to a variety of factors.

Sub-theme 2.4: Assessment, planning, implementation, evaluation and recording steps viewed as problematic based on several factors

The finding showed that all the steps in the implementation of the nursing process were problematic to nurses due to a variety of factors such as time factor, poor intervention by nurses, and interference by family. Nurses experience challenges in implementing all the steps of the nursing process in patient care

This was alluded by participant 003 *“Because we do for the assessment until to the implementation, and then the evaluation. We find it difficult for us to evaluate and re-plan for the patient.”*

This was further supported by participant 007 who said that *“But the evaluation needs to be written down, the set timeframe has lapsed, you find that it is not done and it’s always blank, evaluation is usually...is a challenge.”*

Participant 0014 confirmed that *“Anyway I can say that all steps of the nursing process are problematic. I mean from assessment until recording, we are not attending them well.”*

The findings suggest that all the steps of the nursing process are challenging to the nurses when they implement the nursing process in patient care. This means that the implementation of the nursing process is problematic in all the steps from assessment, formulation of the nursing diagnosis, planning, implementation, as well as recording.

Sub-theme 2.5: Lack of knowledge versus limited training related to the implementation of the nursing process

The findings of the study discovered that there is a lack of knowledge regarding the practical implementation of the nursing process. Lack of knowledge is related to lack of in training for nurses in the hospitals concerning the implementation of the nursing process. Nurses complain that they are not in-serviced, do not attend workshops on the nursing process to empower them. Subsequently, they can not implement the nursing process effectively during patient care. As a result, there is a plethora of challenges during the implementation phase.

Participant 001 verbalised that *“(Laughing) I, I don’t think I, I went to any training, there is no in-service training on the nursing process. No, no (shaking head) no, no, there is no such...training nursing process, there is no training.”*

Participant 009 said *“A common way of training us is needed, maybe in the form of training, in-service, because we are doing it the way I understand it. The training was there before. Shoo, I don’t know what happened and when last we were in-service training, but it’s no longer there.”*

The findings were further supported by another participant 0012 *“I don’t want to lie, I never been in that training scheme, in-service training. Honestly, there is no training in the hospital for the nursing process. I mean we struggle with the nursing process issues. Nothing, nothing at all (shaking head).”*

The finding means that nurses do not have adequate knowledge of the implementation of the nursing process in patient care. The ineffective implementation of the nursing process is further contributed to lack of training and development policies. Which results in lack of in-service training, non-attendance of workshops, and refresher courses in hospitals on implementation of the nursing process during patient care.

Sub-theme 2.6: Inadequate material and human resources are blamed for poor implementation of the nursing process.

The study exposed that poor implementation of the nursing process is related to a shortage of human resources, needed for patient care as well as material resources like stationary, or equipment necessary for effective implementation of the nursing process. This finding was supported by participant 006 who verbalised that *“Okay, the other challenges are the resources. Like in our cubicle there’s only two oxygen points and we’ve got six beds. And then if all six patients are having respiratory problems, and then maybe they need to be given nebulization’s or oxygen, then it’s a problem.”*

Participant 0012 further alluded that *“I think if there can be more staff, because you find yourself maybe in the ward, you are four sisters. And these beds are full of patients, there’s also too much paperwork that they need from us.”*

Participant 0018 confirmed *“Now the challenges in our hospital are the availability of the nursing process documents, where you find there are no recording material, no papers for photocopying, or the machine is not working hence no means to copy.”*

The findings, therefore, suggest that effective implementation of the nursing process is affected by shortage of staff, inadequate supply of nursing process materials, and a lack of equipment. Thus, both human and material resources are important if the implementation of the nursing process has to be successful.

Sub-theme 2.7: Lack of consistency during the implementation of the nursing process identified amongst nurses

The study detected that there is no uniformity and consistency throughout the various wards in the same hospital on implementation of the nursing process. On one hand, some nurses are implementing the nursing process throughout patient care. On the other hand,

others decide to ignore some aspects of the nursing process hence inconsistencies amongst nurses verbalised. The finding was confirmed by *Participant 009* “*The nurses yes, need to be trained really. Because what we experience, we are challenging a different setup. Some nurses are from another province and some are from another region. So, the way we manage it, we need to have one common understanding.*”

Another participant 0014 indicated that “*Yes, I think if you can have this programme of the nursing process. At least once per month, we will be taught similar things and do it the same way.*”

Participant 0016 “*We need in-service especially when things, things are always changing in now and again. You find in the same hospital nurses doing nursing process differently, we need uniformity. So, some of us, are trained for nursing care plan a long time ago, whereas they have new information.*”

The finding suggests that there is no uniformity during the implementation of the nursing process as different wards within the same hospitals implement the nursing process in different ways. This means that there is no standardised way that nurses follow when they implement the nursing process in patient care.

Sub-theme 2.8: Poor support from management to nurses implementing the nursing process

The study established that during the implementation of the nursing process there is poor support from hospital management to the nurses. This impacts negatively on nurses and discourages them. The nurses pointed out that they need to be appraised when they have done well to keep up the good work. Additionally, the nurses posited that poor support demotivates them, seemingly, their efforts are not valued.

This finding was supported by one participant 002 who indicated that “*Mm..... and often we are trying our best to do all the things correctly but sometimes it is like nobody sees what you are doing with limited the resources. I mean management is always blaming us, this is really not motivating us.*”

Another participant 006 indicated that *“There are some but eish I don’t know; you see we are not motivated but remarks of some big bosses, they really do not give you the nerve, you are always wrong and they do not have time to ask us the challenges. You are always told there is poor patient care, but what are they helping us to improve.”*

The finding implies that there is inadequate management support for those nurses who are implementing the nursing process in patient care. The nurses feel that they are not appreciated for the work they are doing despite limited resources. Moreover, the nurses are not given the support and motivation to stimulate them to use the nursing process.

4.4.2.3 THEME 3: SUGGESTED SOLUTIONS FOR IMPROVEMENT OF THE IMPLEMENTATION OF THE NURSING PROCESS STEPS

The nurse who were interviewed came along with suggestions that could improve the implementation of the nursing process steps in public hospitals in the Limpopo Province and are reflected in the following sub-themes:

Sub-themes

- 3.1 Training programme viewed as a strategy for the improvement of the nursing process.
- 3.2 The content of the training programme and the reasons thereof suggested.
- 3.3 Importance of the introduction of teaching sessions in the wards raised.
- 3.4 The Importance of including all categories of nurses in the training were outlined.

Sub-theme 3.1: Training programme viewed as a strategy for the improvement of the nursing process

The findings revealed that there is no training programme in place addressing nursing process implementation in the hospitals. The study indicated that the inadequate implementation of the nursing process is a related lack of a training programme in hospitals. This was confirmed by participant 008 indicated that *“Ja, I think we need training on the steps of the nursing process...we do not have enough knowledge, we are*

outdated. Though I can say we know how to do the nursing process, whereas we are not sure thus why I say we need new updates on the nursing process.”

Nurses have suggested that the development of a formal training programme specifically on the nursing process, could improve the implementation of the nursing process in public hospitals in the Limpopo Province. Participant number 009 explained *“The training to. So, the training needs to be reinforced. And we must have the programme for training in the nursing process in all hospitals. It’s very much confusing. So, that’s why I say we need to have one standardised form Yes. and the training to is important.”*

Participant 0018 also added that *“Yes. Like when we are having students in the ward, I think we need to go back to teaching programmes in the ward and on spot teaching. Nurses can improve implementation of the nursing process if we arrange for teaching sessions in the wards for ours, nurses, and students.”*

Sub-theme 3.2: The content of the training programme and reasons thereof suggested

The study findings found out that it is important that all the steps of the nursing process are to be included in the training programme for nursing process implementation because the steps are interrelated to each other. This was further confirmed by participants who verbalised the following:

Participant 001 who indicated that *“Yes. To me, I emphasise that if possible training of the nursing process should be done weekly or monthly. I think training must cover all steps of the nursing process including recording because we can’t be trained in bits and pieces, we need the whole process. A recording is a challenge and must also be covered”*

The findings were confirmed by participant 004 *“Anyway since the nursing process steps follow each other I think it’s better if training covers all the steps because we do not have adequate knowledge about these steps and the skills to collect data from our patients”. How to formulate the nursing diagnosis is a big problem? Ja, the importance of evaluation and recording also. Anyway since the nursing process steps follows each other I think it’s better if training covers all the steps.”*

Another participant 0015 outlined that *“Yes, it be continuous because sometimes you find that there are other staff who train and go because sometimes like we have got the student and if they can come and go through that training. The training must cover all the steps of the nursing process and include the importance of recording so that we can improve our recording.”*

This infers that nurses should be trained in all steps of the nursing process and not part of it. The suggestion was to starting from data collection, formulation of nursing diagnosis, planning, implementation, evaluation, and recording are all equally important.

Sub-theme 3.3: Importance of introduction of teaching sessions in the wards raised

The study further recommends the use of continuous teaching programmes in the wards including on-spot teaching as another strategy to improve implementation of the nursing process in patient care. Teaching programmes has to be available in the ward for nurses to be well equipped with all aspects of the nursing process.

The following responses from the participants support this finding, participant 0011 *“It’s only here in the ward, we just trying to teach nursing process and facilitate it because we are having students here in the ward who are on training, going through with it.”*

Participant 0014 *“Mm, mm. Yes, every morning in the wards after morning devotion, they just take this nursing process and then talk about it, so that everybody gets used to it yes. We also check on previous admissions and try and correct each other.”*

Participant 0017 *“In-service training in the unit; we do it when we do it for ourselves but it will be not for the hospital. It’s done but rarely, not so often.”*

Participant 0018 *“Yes, like when we are having students in the ward, I think we need to go back to teaching programmes in the ward and on spot teaching. Nurses can improve implementation of nursing process if we arrange for teaching sessions in the wards for ours, nurses, and students.”*

This means that those teaching sessions that are conducted in the wards serve an important role in equipping nurses including student nurses on nursing process issues that will encourage nurses to implement it in patient care. The continuous teaching

programme in the wards is viewed as a strategy that can improve the implementation of the nursing process.

Sub-theme 3.4: Importance of including all categories of nurses in the training outlined.

The nurses who were interviewed also suggested that the training on the nursing process should include all categories of nurses to familiarise them with the nursing process. Thus, that it can be effectively implemented. The various activities included in implementing the nursing process to patient care requires the various categories of nursing personnel to work as a team. This finding was supported by Participant 006 who said that *“If people are trained and become knowledgeable about this, things will improve. I think the training must include the lower categories of nurses because, usually, they do the nursing process when the ward is too busy and sisters countersign, so I cannot sign for the wrong process. I think that will make a change.”*

The finding was further supported by participant 0012 *“Like in-service training in the nursing process, there must be a training programme in place which is known by all categories of nurses on when is the training taking place. Every nurse in the hospital must be included in the training of the nursing process.”*

The finding, therefore, suggests that all categories of nurses have to be included in the training of the nursing process as they participate in its implementation. The scope of practice is considered where the junior nurses are involved during the implementation of the nursing process. Although, with supervision from the professional nurses who check, correct, and then countersign what they do.

4.4.2.4 THEME 4: DESCRIPTIONS RELATED TO RECORDING DURING THE IMPLEMENTATION OF THE NURSING PROCESS STEPS.

The findings of the study identified a wide range of descriptions associated with the importance of recording. A lack of consistent recording, keeping of complete records, clear and accurate records. Record-keeping when implementing the nursing process and were outlined in the following sub-themes:

Sub-themes

- 4.1 Recording of executed activities viewed as important.
- 4.2 Explanations of the processes that should be recorded were outlined.
- 4.3 The importance of recording during the implementation of the nursing process steps outlined.
- 4.4 Lack of consistent recording in the patients' files based on several factors.

Sub-theme 4.1: Recording of executed activities viewed as important.

Nurses who were interviewed articulated that the recording of all the activities done on the patient is an important aspect during the implementation of the nursing process. The most recording should be completed and accurate at all times. This was mentioned by Participant 008 who said *"Because according to the principles of record-keeping if the record is not complete at all it doesn't talk. The recording is important in nursing and it can assist you in case of a lawsuit because if you do not record you did not do that."*

The nurses also postulate that this is a way of communicating with other members of the multidisciplinary team on continuity of care of the patient and also serves as a legal record. Participant 0010 alluded that *"Recording must be done on everything done to the patient, and in the nursing recording is very important because what is not recorded, it means it was not done. In the progress report of course we are expected to write everything that we are doing to the patient, or for the patient and this helps other staff members to know how far we have nursed the patient, in other words, that's how we talk to each other."*

Participant 0011 *"Ja, I record everything because relatives can come later to hospital, they say we brought the patient and the skin was intact. If you did not record on day one you can be in trouble, they can sue the hospital because of your incomplete records."*

This finding concludes that complete and clear recording is important because it serves as a communication tool amongst nursing staff and other multidisciplinary teams for

continuity of care. The findings further suggest that recording can protect the nurse and institution against lawsuits and demands by patients and relatives.

Sub-theme 4.2: Explanations of the processes which must be recorded outlined.

The study findings outline that recording has to start from the assessment of the patient, nursing diagnosis formulation, planning of patient care, implementation of nursing activities, and evaluation of the care given to the patient. All activities done and noted throughout the care of the patient should be recorded in the patient's file.

Participant 003 *"We assess the patient, we check the patient's body, and then we do the vital signs. Then we take, we also test the urine. If the patient can stand, we also take the weight of the patient and we have to record all those activities in the patient file."*

Participant 004 *"Okay. Like...Mm. Everything we have done to the patient we ended up recording because in nursing we say if you do something to the patient that needs recording it is not done."*

Participant 0017 *"Recording fits in all steps when you have to do your planning, then you are implementing, you do your implementation, you need to record, even if I have done it here, evaluated, I need to go back to the nursing, uh, progress and record what I've done."*

These findings suggest that all nursing actions that are done on the patient must be recorded as failure to do likewise is believed that the care was not rendered. The recording of care given to the patient also serves as evidence of the nursing care that was done to the patient.

Sub-theme 4.3: Importance of recording during the implementation of the nursing process steps were outlined.

The study indicated that recording is important during the implementation of all steps of the nursing process. Recording is vital in nursing practice because what is not recorded is assumed to have not been done on the patient. A recording is also essential in the nursing practice as it protects the nursing staff during lawsuits by the patients.

Participant 008 said *“Actually, you fill the forms after assessing the patient and collecting the history and this recording is done in all steps. A recording is important in nursing and it can assist you in case of a lawsuit because if you do not record you did not do that.”*

Participant 0010 alluded that *“Recording must be done on everything done to the patient and in the nursing recording is very important because what has not been recorded means it was not done. In the progress report of course we are expected to write everything that we are doing to the patient, or for the patient.”*

Participant 0011 *“Ja, I record everything because relatives can come later to hospital, they say we brought the patient and the skin was intact. If you did not record on day one you can be in trouble, they can sue the hospital because of your incomplete records.”*

The findings of the study imply that recording is an important aspect during the implementation of the nursing process. Keeping clear and complete records not only protects the nurses, but also the hospital from unnecessary lawsuits which further put financial constraints on the department as a whole.

Sub-theme 4.4: Lack of consistent recording in patients’ files based on several factors.

Nurses explained that despite the importance of recording known, some nurses still fail to do consistent recording of all nursing interventions done to the patient. There are many reasons for inconsistent recording which include high patient ratios in the wards, shortage of staff, and workload amongst nurses.

Participant 005 indicated that *“Yes, we record everything but sometimes as a nurse you know we postpone saying I will record later, you end up forgetting and or go off for a long weekend. Sometimes it is due to ignorance or laziness, I don’t know”*

Participant 009 *“A lot, hence it means you’re also having a problem when you implement the nursing process. Mm, because if you don’t have stationery you cannot work. Because it needs to be recorded. And if it’s not recorded in nursing it means it is not done.”*

Participant 0010 “In the progress report, of course, we are expected to write everything that we are doing to the patient, or for the patient. Sometimes we fail to record because we are having a shortage and the ward is full.”

The findings suggest that regular recording of the nursing care in the patient’s records is associated with increased patient’s ratio in the wards and shortage of staff to cater for such high patient volumes. Another factor contributing to constant recording is the shortage of nursing process material for continuous recording.

4.4.2.5 THEME 5: STRATEGIES USED BY NURSES TO THE QUALITY IMPLEMENTATION OF THE NURSING PROCESS STEPS.

The study revealed that nurses utilise a variety of strategies to ensure that there is quality in the implementation of the steps of the nursing process during patient care. The following sub-themes emanated from this theme.

Sub-themes

- 5.1 Provision of support towards effective implementation of nursing process steps.
- 5.2 Clear lines of communication on an implemented strategy to support nurses.
- 5.3. Lower categories of nurses restricted to execute some nursing process steps to ensure quality implementation.

Sub-theme 5.1: Provision of support towards effective implementation of the nursing process steps.

The nurses stated that they support each other within the ward when implementing the nursing process. There is teamwork that is promoted within the ward where nurses assist each other as a way to motivate each other even though others are reluctant to ask for assistance. The findings were supported by participant 002 indicated that *“Mm..... and often we are trying our best to do all the things correctly but you do not know what to do, you approach another nurse to be assisted to continue but others do not ask for help, if you ask others help you.”*

Participant 007 *“We, our motto, we talk to everyone in the ward, that if you feel like you*

forget something you just go and ask a colleague to assist you.

Because the nursing process is continuous. If you understand the nursing process better other nurses will ask for assistance and this is how we support each other in the ward.

Participant 0013 further indicated that *“We usually assist each other in the ward with the nursing process. Sometimes you feel you are stacked up and not knowing what to write. Other colleagues with understanding assist you to complete the file.*

Sub-theme 5.2: Clear lines of communication on an implemented strategy towards the support of nurses

The study identified that there are no clear channels of communication from the top. Senior management should support those nurses who are implementing the nursing process strategy in patient care but the nurses in the wards are trying to support each other as they clarify each other when one does not clearly understand something regarding the nursing process.

The findings are in line with assertions from participant 002 *“We, our motto, we talk to everyone in the ward, that if you feel like you forget something you just go and ask a colleague to assist you. Because nursing is continuous. If you sort of understand the nursing process better other nurses will ask assistance and this is how we support each other in the ward”*.

Participant 009 also postulated that *“And we must have the motivation from above so that we must share the common understanding. In the wards we try to talk about challenging aspects in the steps of the nursing process, I mean we are free to assist each other when we meet challenges when implementing the nursing process.”*

The nurses complain that they are always blamed from the management side for not implementing the nursing process effectively. Although, the nurses are trying in the wards to talk about the nursing process every morning. This was confirmed by participant 007 *“If in the ward you sort of understand the nursing process better other nurses are always free to ask your for assistance, but others they will not indicate they do not understand but just leave gaps in the file. “*

Participant 0012 added that “We also do not know exactly who else to ask about the nursing process strategy which is being used, is not clear I mean management side. As sisters in the wards, we are ready to assist our nurses but sometimes we also get stuck and need management to step in.

This denotes that there are no clear lines of communication between management and nurses, at the operational level on the implementation of the nursing process approach. The nurses in the wards are assisting each other with aspects of the nursing process that are challenging. The professional nurses in the wards are the ones that are supporting, and motivating nurses who are having challenges in implementing the nursing process.

Sub-theme 5.3: Lower categories of nurses restricted to execute some nursing process steps to ensure quality implementation.

The study identified that lower categories of nurses are restricted from performing certain duties such as assessment, planning, implementation, and evaluation in the implementing of the nursing process. The scope of practice as outlined by the South African Nursing Council is considered, when implementing the nursing process where the junior nurses are to be countersigned by a professional nurse before activities can be executed effectively.

This was confirmed by participant 007 who indicated that *“Like I said, the nursing process needs to be validated by a professional nurse, whose scope of practice allows to perform that. Sometimes you find that it was done by a sub-professional, lower categories not supposed to assess, diagnose and plan alone as is not within their scope, and if it was not countersigned by a professional nurse, therefore it is wrong and incomplete recording.”*

Furthermore, another participant 008 also added that *“If it’s a professional nurse who implement the nursing process, we don’t countersign. If an assessment was done by a lower category nurse, the professional nurse must review and countersign it to ensure that at least we have the correct plan.”*

Participant number 0018 who said *“But the decision that was taken due to shortage is that the nursing process can even be developed by a nursing auxiliary and the enrolled nurse then the professional the nurse has to come and like check and countersign.*

The finding, therefore, shows that the scope of practice of various categories of nurses is considered, when implementing the nursing process. The professional nurse takes the leading role throughout. In cases where junior nurses were involved in implementing the nursing process to patient care, they are supervised by the professional nurses who check the process and then countersign.

4.5 PRESENTATION OF FINDINGS FOR QUANTITATIVE STRAND.

The main objective of the quantitative strand is to provide information, presentation of the results, on how participants can implement the nursing process in public hospitals in the Limpopo Province, South Africa. Their challenges, and their training needs regarding the nursing process. The findings of this strand are presented using tables, charts, and graphs after that the description of the findings is presented. The findings of this study are discussed based on the information that emerged from the quantitative data analysis of the self-administered questionnaires with the respondents.

4.5.1 Response rate

He response rate of the respondents presents in table 4.2 below.

Table 4.2 The response rate for this study.

Descriptive information	Number of questionnaires	Percentage
Total number of questionnaires distributed	283	100
Total number of questionnaires returned	244	86.2
Total number of usable questionnaires	242	85.5

The response rate of the participants shows that a total of 283 questionnaires were distributed and 244 were successfully returned and two were not usable due to errors. The response rate was 85.5%.

4.5.2 Demographic findings of respondents

This section indicates the demographic profile of the respondents. It includes the gender, age, highest educational qualification, period of employment into the post, and period of implementing the nursing process during patient care. Figure 4.1 below represent the gender of the respondents.

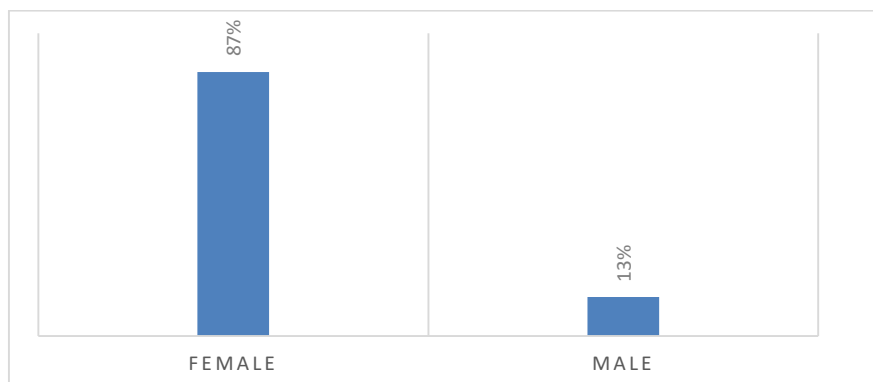


Figure 4.1 Gender of respondents

The study found that the majority of nurses are females (87%) while males only constitute 13%. It, therefore, proves that the majority of the respondents were females.

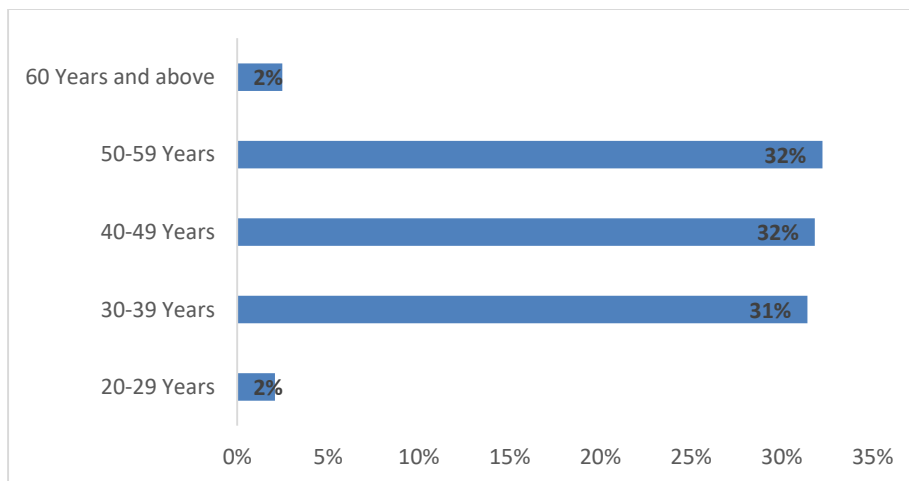


Figure 4.2: Age of respondents

The finding of the study indicated that majority of nurses are between ages 50-59 years (32%), 40- 49 (32%) while (31%) of nurses are between ages 30-39 years and (2%) are between ages 20-29 years. Lastly, (2%) are between ages 60 years and above. This means that majority of nurses are within the middle age group with less young nurses. The schematic bar graph 4.2 above represent the age of the respondents.

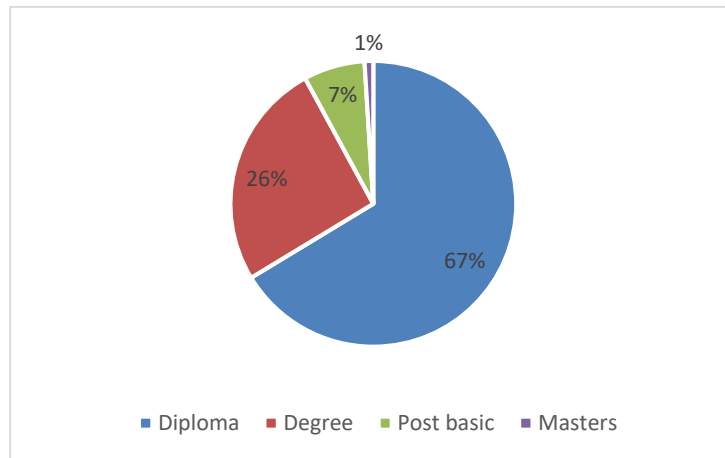


Figure 4.3: Highest educational qualification

The findings illustrate that 161 (67%) nurses have a Diploma in Nursing, 63 (26%) have a Degree, 16 (7%) have a Post Basic qualification in nursing while only two (1%) hold a Masters. None of the respondents hold a Doctoral qualification. The schematic pie chart above figure 4.3 represent the highest educational qualifications of respondent.

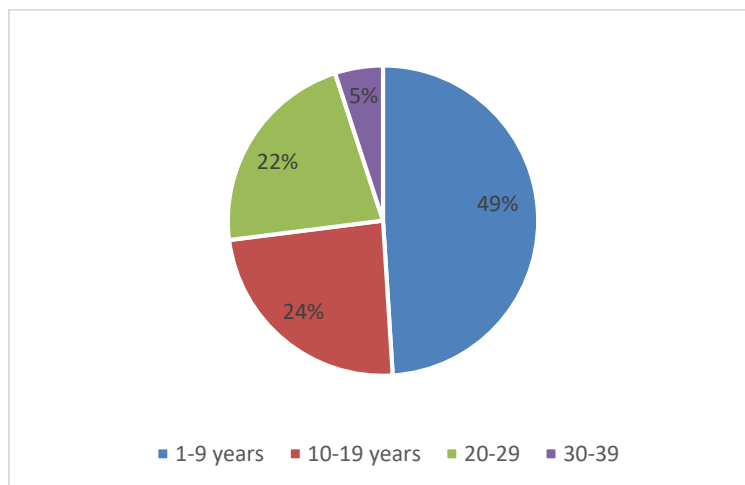


Figure 4.4: Period of employment in the post.

Furthermore, 119 (49%) nurses were employed as professional nurses for one to nine years, 57 (24%) for 19 to 20 years, 53 (22%) for about 20 to 29 years and 13 (5%) have 30 to 39 years in the post. This implies that all nurses were employed as professional nurses for a reasonable period and long enough to implement the nursing process in patient care. The following pie chart diagram figure 4.5 represent the period of implementing nursing process during patient care.

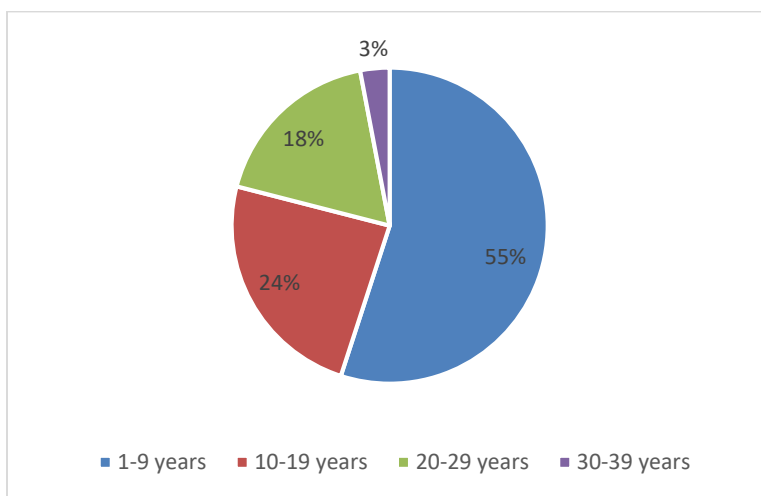


Figure 4.5: Period of implementing the nursing process

Majority of the respondents 132 (55%) were implementing the nursing process for one to nine years, 69 (24%) for 10 to 19 years, 43 (18%) for 20 to 29 years while eight (3%) were implementing the nursing process for 30 to 39 years. This shows that nurses were implementing the nursing process for a prolonged period.

4.5.3 Professional nurses' practices regarding the implementation of the nursing process.

This section represents the practices of nurses when implementing the nursing process. The steps of the nursing process reflected included assessment, formulation of nursing diagnosis, planning of care, implementation of nursing actions, and evaluation of care rendered. The recording is at the centre of each nursing process step. The following table 4.3 represent the professional nurses' practices in the implementation of the nursing process.

Table 4.3 Professional nurses' practices in the implementation of the nursing process

Professional nurses' practices regarding the implementation of the nursing process	n=242 n(%)	n=242 n(%)	n=242 n(%)
	Agree	Disagree	Not sure
B1. I can do subjective assessment correctly	225 (93%)	6 (2%)	11 (5%)
B2. I can do objective assessment correctly	229 (95%)	6 (2%)	7 (3%)
B3. I can prioritise patients' problems correctly	222 (92%)	13 (5%)	7 (3%)
B4. I can formulate correct NANDA nursing diagnosis after assessing patients	70 (29%)	81(33%)	91(38%)
B5. I can formulate correct potential nursing diagnosis	98 (41%)	58 (24%)	85 (35%)
B6. I can plan correct nursing actions in relation to nursing diagnosis	220 (91%)	8 (3%)	14 (6%)
B7. I can develop realistic goals/expected outcomes correctly	201 (87%)	15 (6%)	17 (7%)
B8. I can develop realistic time frames for identified problems	154 (64%)	36 (15%)	52 (21%)
B9. I can implement planned nursing intervention timeously	163 (67%)	69 (29%)	9 (4%)
B10. I can evaluate care given based on time frame	109 (45%)	120 (50%)	13 (5%)
B11. I can re-plan for patients' unresolved needs	176 (73%)	59 (24%)	7 (3%)

The findings illustrated that the majority of nurses can do subjective assessments correctly as indicated by 225 (93%). Eleven respondents (5%) were not sure while two (3%) were not able to do a subjective assessment. Most of the nurses 229 (95%) were able to do an objective assessment, six (2%) were not able to do that while seven (3%) were not sure. This highlights that professional nurses can do a subjective and objective assessment of patients correctly. The study further revealed that 242 (92%) of the nurses can prioritise patients' problems correctly. Thirteen respondents (5%) are not able to do

that and seven (3%) were not sure which indicates that the nurses can prioritise patient's problems correctly.

The majority of the respondents 91 (38%) were not sure about how to formulate NANDA nursing diagnosis. While 81 respondents (33%) were not able to do the nursing diagnosis and only 70 (29%) were able to formulate the nursing diagnosis. Ninety-eight (40%) were able to formulate a potential nursing diagnosis, 85 (35%) were not sure and 58 (24%) were not able to formulate potential nursing diagnosis. As a result, nurses were not able to formulate correct NANDA nursing diagnoses as reflected by a total of 172 (71%) for nurses who are not sure and those who are not able to formulate nursing diagnosis. The finding shows that nurses are not able to formulate nursing diagnoses correctly.

A large number of respondents 220 (91%) can plan correct nursing actions, eight (3%) were not able while 14 (6%) were not sure. The majority of the respondents (87%) were able to develop realistic goals, 15 (6%) were not and 17 (75%) were not sure. Furthermore, about 154 (64%) respondents were able to develop realistic time frames, 36 (15%) were not and 52 (21%) were not certain. This indicates that professional nurses can do the planning step of the nursing process correctly.

The majority of the respondents 163 (67%) can implement the nursing actions timeously. While about 69 (29%) are not able to do that, and nine (4%) were not sure. This shows that professional nurses can implement nursing actions or interventions in time. The findings suggest that the majority 120 (50%) of the respondents were not able to evaluate the care given to the patients. However, 108 (45%) were able to evaluate and 13 (5%) were not sure. This elucidates that professional nurses are not able to evaluate the care that they give to patients due to a variety of factors. The following graph figure 4.6 represent professional nurses practices in the implementation of the nursing process.



Figure 4.6: Professional nurses’ practices on the implementation of the nursing process.

The analysis of the implementation of the steps of the nursing process was further analysed using predetermined criteria where a respondent was expected to achieve a total score of 75% and above in all the steps of the nursing process. Thus, to be regarded as being able to implement the nursing process. The standard was set based on the fact that the nursing process is the core of the nursing practice and failure to implement it correctly compromises the quality of the care given to the patients.

The findings discovered that the majority of respondents 137 (57%) revealed in their responses by scoring less than 75% indicating that they were not able to practice implementation of the steps of the nursing process well, during the care of their patients in the wards. Only 104 (43%) of the respondent achieved 75% and more indicating that they were able to practice implementation of the steps nursing process well in caring for their patients. The findings show that professional nurses were not able to implement the nursing process adequately and effectively during patient care. The following table 4.4 represent professional nurses’ practices in the implementation of the nursing process.

Table 4.4 Professional nurses’ practices in the implementation of the nursing process

Professional nurses’ practices regarding the implementation of the nursing process	n=242 n(%)	n=242 n(%)	n=242 n(%)
	Yes	No	Not sure
B12 Recording is important in implementation of the nursing process	236 (98%)	3 (1%)	3 (1%)

B13 All nursing actions done by nurses in this hospital are recorded timeously in the patient file	113 (47%)	87(37%)	40(17%)
B14 Nurses keep clear, accurate and complete patient records at all times	86 (36%)	139(57%)	17(7%)
B15 Incomplete recording affect the quality of patient care when implementing the nursing process	223 (92%)	12(5%)	7(3%)
B16 Adequate provision of stationery can improve nursing process implementation	200 (83%)	18(7%)	24(10%)
B17 In nursing practice it is believed "what is not recorded has not been done to the patient"	236 (98%)	1 (0.4%)	5 (2%)

The findings of the study exposed that 236 (98%) of nurses agree that recording is important in the implementation of the nursing process. While three (1%) disagree and three (1%) were not sure of the importance of recording in the implementation of the nursing process. The finding suggests that nurses are aware that recording is an important aspect in the implementation of the nursing process.

The majority of the nurses 113 (47%) agreed that all nursing actions done on patients are recorded timeously in patients files. However, about 87 (37%) disagree with the statement while 40 (17%) were not sure. This implies that nurses record all actions done on the patient during patient care. The majority of the respondents 139 (57%) did not agree that nurses keep clear accurate and complete records at all times, 86 (36%) of nurses agreed with that while 17 (7%) were not sure. This denotes that nurses do not keep clear, accurate, and complete records of the care rendered to their patients' records.

The findings also discovered that 223 (92%) agreed that incomplete recording affect the quality of patient care when implementing the nursing process. Twelve respondents (5%) disagreed while seven (3%) were not sure. The finding suggests that nurses are knowledgeable that if a recording is not complete it affect the quality of care given to patients.

In addition, almost 200 (83%) of nurses agreed that adequate provision of stationery can improve nursing process implementation, 18 (7%) disagreed while 24 (10%) responded that they were not sure. This means that lack of stationery affects the implementation of the nursing process. The majority of the nurses 236 (98%) agreed that in nursing practice it is believed that “what is not recorded in the patient’s file has not been done to the patient”. This implies that nurses know how important is recording when implementing the nursing process. The following bar graph 4.7 represent nurses who have undergone training on the nursing process.

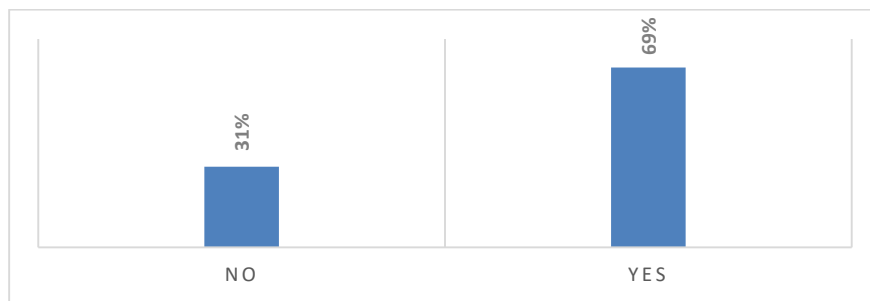


Figure 4.7: Have you ever undergone training in the nursing process?

The findings exposed that 167 (69%) of the respondents have undergone training in the nursing process and 75 (31%) have not undergone training on the nursing process. This shows that the professional nurses implementing the nursing process were ever trained in the nursing process. The following schematic pie chart figure 4.8 represent the last in-service training attended on the nursing process.

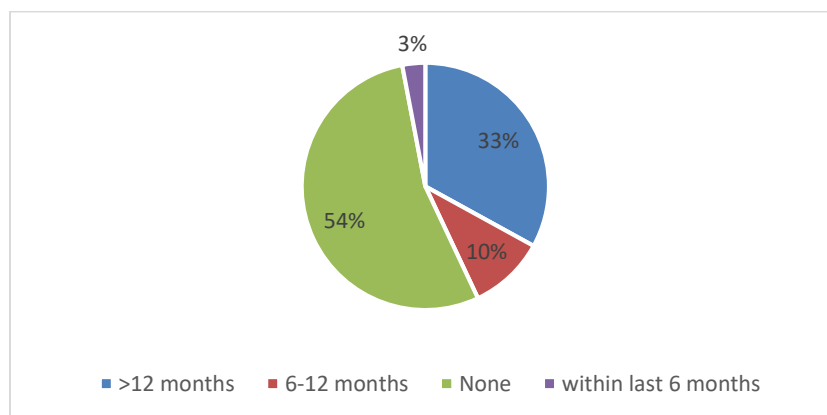


Figure 4.8: Indicate when last did you attend in-service training on the nursing process?

Most of the respondents 130 (54%) pointed out that they have never attended in-service training on the nursing process, 80 (33%) have not attended in-service training for the past 12 months. On the other hand, 24 (10%) within the past six to 12 months, and 6 (130 attended in-service training within the last 6 months. The findings suggest that nurses are not taken for in-service training in the nursing process. The following schematic diagram figure 4.9 represent workshop attendance to improve implementation of the nursing process.

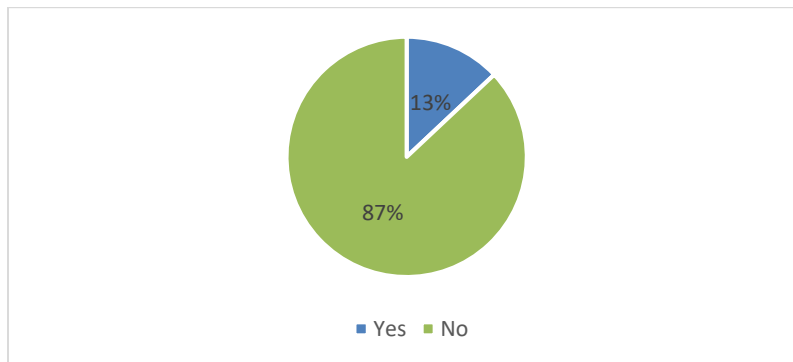


Figure 4.9: Do you attend workshops to improve the implementation of the nursing process?

The findings exposed that 211 respondents (87%) do not attend workshops to improve implementation of the nursing process. While only 31 (13%) admitted that they attend workshops to improve implementation of the nursing process. The following graph, figure 4.10 represent how competent professional nurses are in implementing the nursing process approach. These findings indicate that nurses are not sent for workshops on the implementation of the nursing process.

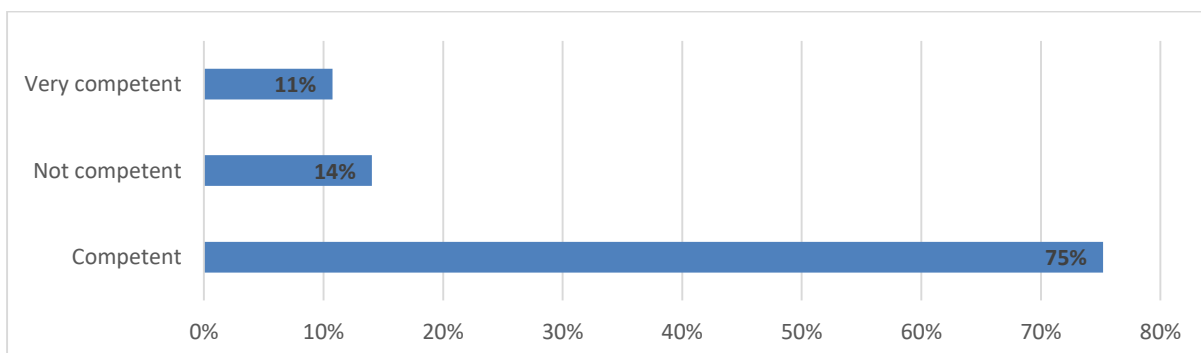


Figure 4.10: How competent are you in implementing the nursing process approach?

The study pointed out that 182 (75%) of the respondents rated themselves that they were competent in implementing the nursing process, 14 (34%) were not competent while 26 (11%) rated themselves as very competent. This indicates that the majority of the nurses rate themselves as competent in the implementation of the nursing process even though they do not meet the predetermined criteria to be regarded as implementing the nursing process effectively. The following table 4.5 represent the assessment of the professional nurses training needs on the nursing process.

Table 4.5: Assessment of professional nurses' training needs on the nursing process

	n=242 n(%)	n=242 n(%)	n=242 n(%)
Assessment of professional nurses' training needs regarding the nursing process	Agree	Disagree	Not sure
C5 The hospital has a staff training and development policy with on the nursing process.	43 (18%)	80 (33%)	119 (49%)
C6 The hospital has a formal training programme to improve the implementation of the nursing process	40 (17%)	125 (52%)	77 (32%)
C7 The hospital conducts routine in-service training for nurses in the nursing process.	65 (27%)	145 (60%)	32 (13%)
C8 There is adequate management support for professional nurses who are implementing the nursing process in patient care.	87 (36%)	102 (42%)	53 (22%)
C9 Professional nurses are sent for seminars/workshops on the practical implementation of the nursing process.	30 (12%)	179 (74%)	33 (14%)
C10 There are aspects of the nursing process which professional nurses need to be trained on	165 (68%)	21 (9%)	56 (23%)
C11 Development of a training programme can improve the implementation of the nursing process	203 (84%)	7 (3%)	32 (13%)

The results of the study indicated that 119 (49%) of the nurses were not sure if the hospital has a staff training and development policy regarding the nursing process. Therefore, 80

(33%) disagree there is a training policy while 40 (18%) agree that there are staff training and development policy. This finding shows that there is no training policy for staff training and development in hospitals.

A majority 125 (52%) disagree that the hospital has a formal training programme. 77 (32%) were not sure while 43 (18%) agree there is a formal training programme in place. This implies that there is no formal training programme for improving the implementation of the nursing process in hospitals. Mostly 145 (60%) disagree that the hospital conducts in-service training on the nursing process, 65 (27%) agree there is an in-service training while 32(13%) were not sure. The finding denotes that there is no in-service training conducted for nurses on the nursing process in the hospitals.

Furthermore, about 102 (42%) participants disagree that there is management support for nurses implementing the nursing process. While 87 (36%) agree there is management support. Therefore, 53 (22%) are not sure if there is any management support to nurses implementing the nursing process. Thus, about 179 (74%) of nurses disagree that the nurses are sent for workshops or seminars on the practical implementation of the nursing process, 33 (14%) are not sure of that while only 30 (12%) agree. The findings indicate that there is no management support for nurses who are implementing the nursing process in public hospitals. Furthermore, there are no workshops and seminars to equip nurses on the implementation of the nursing process.

A great number of respondents 165 (68%) agree that there are specific aspects of the nursing process that nurses need to be trained on, 56(23%) are not sure while 21(9%) disagree. The findings display that there are various aspects of the nursing process that nurses need to be trained on. A mainstream of almost 203 (84%) of nurses agreed that the development of a training programme can improve on the implementation of the nursing process. However, about 32 (13%) were not sure, while seven (3%) disagree with that. The finding suggests that the development of a training programme can improve the implementation of the nursing process during patient care.

4.6 MERGING OF QUALITATIVE AND QUANTITATIVE FINDINGS.

The study used a mixed-method convergent parallel design where there is merging of results obtained from both qualitative and quantitative approaches. In this design, the merging of results from qualitative and quantitative data is done to bring a clearer understanding. Thus, more than what was given by qualitative or quantitative results alone. Most importantly the merging was done through a comparison where the quantitative and qualitative results were brought together to determine the extent to which the two data confirm, contradict, or expand. The study employed a mixed-method joint display to present the integration or the merging of results within a single study (Creswell, 2014).

Generally, the main aim of a visual joint method display was to represent the integration of the results. It therefore enabled readers to can follow the study with ease. The display presented both the convergent and divergent findings. The following schematic diagram figure 4.12 represents the merging of qualitative and quantitative results to identify the extent to that the two sets of results converge, diverge, and relate to each other. The arrows indicate the correspondence between the qualitative themes and quantitative constructs.

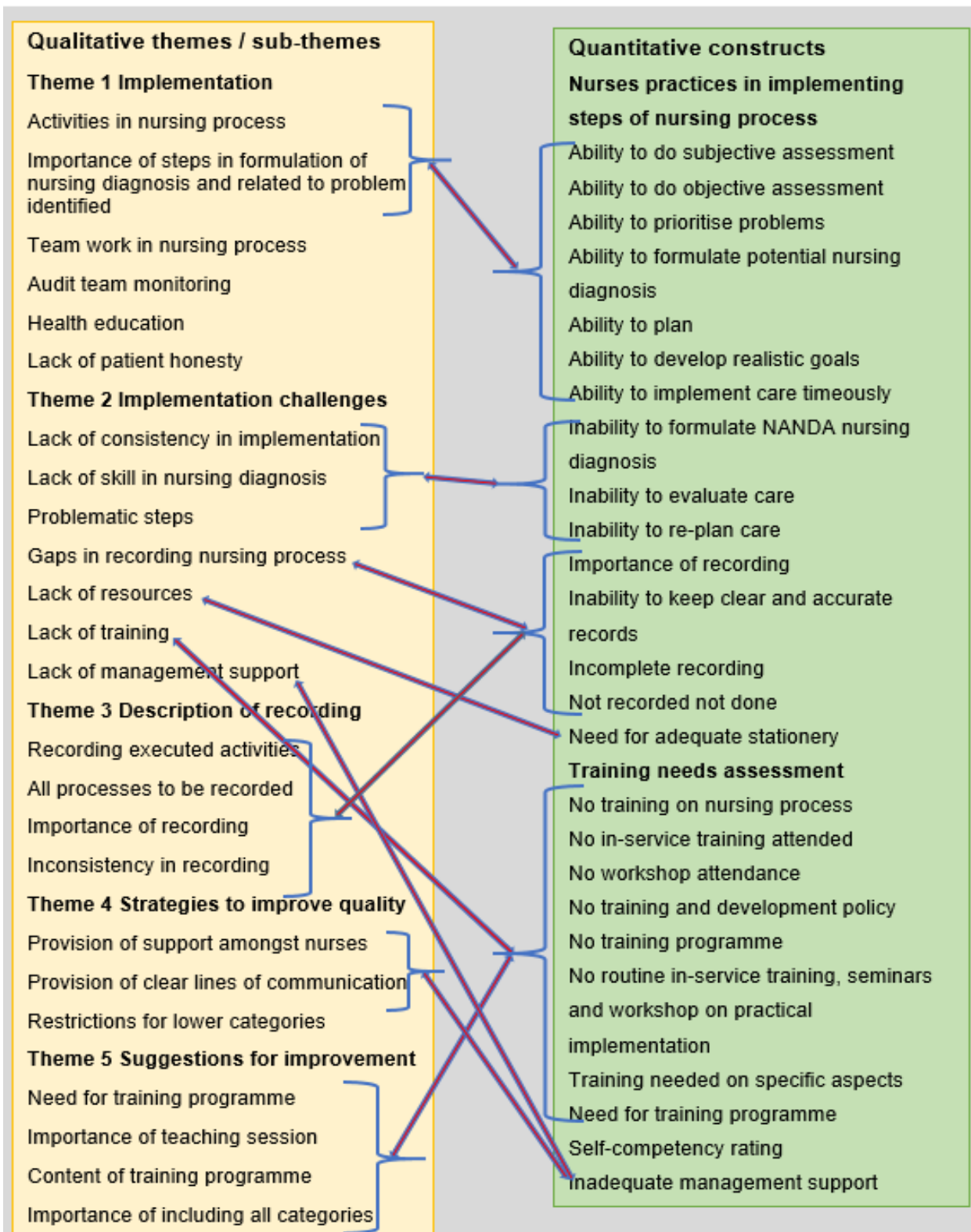


Figure 4.11: The merging of qualitative themes and quantitative constructs by a joint display

4.7 INTERPRETATION AND DISCUSSION OF MERGED FINDINGS

The findings presented narratively in this section are a result of the merging of the qualitative and quantitative findings. The findings revealed some similarities in the themes, constructs, and differences. The discussion in this section focuses on similar findings from both the qualitative and quantitative results. The dissimilar findings will however be highlighted for clarity purposes as the discussion is more focused on the merged results.

4.7.1 Biographic information

The biographic findings in both strands revealed that a large number of nurses were females. These findings indicate that nursing is still a female-dominated profession. The study further identified that most professional nurses were in their middle age. These findings presume that the nursing profession is dominated by middle-aged nurses with a few young nurses. A wide number of perturbational nurses have a nursing Diploma, a nursing degree and there were no nurses who have a doctoral degree. Therefore, nurses are to be encouraged to pursue post-graduate studies. Professional nurses involved in the study have experience in nursing and the implementation of the nursing process.

The finding of a study conducted by Juliff, Russell, and Bulsara (2016) recommend that from both societal and cultural contexts the male nurse should be viewed from a different dimension. Thus, the nursing profession can be considered a gender-neutral profession. The study further alluded that if nursing is viewed as a gender-neutral profession. This will encourage more males into the nursing profession. The findings of this study are related to that of a study conducted by Christensen and Knight (2014) where males still have the feeling of being like outsiders in the profession, because of the nature of the nursing profession being perceived as a female-dominated profession.

4.7.2 Correspondence between qualitative and quantitative results

The correspondence between the results of the two strands refers to the similarities, that were identified during the merging stage of qualitative, and quantitative results. This section, thus, presents the interpretation and discussion of the merged results from qualitative themes, quantitative constructs and literature control narratively. During the

merging of the qualitative and quantitative results, the following similarities were identified as illustrated in figure 4.12 above.

Results 4.7.2.1: Nursing process activities performed during initial contact with patients.

The merged findings indicated that when the nurses perform their activities during patient care they follow the steps of the nursing process. The steps that can be implemented include the assessment of patients both subjectively and objectively. The planning of the nursing intervention with dates, time, expected outcomes, and time frames. The implementation of planned actions is carried out even though there are challenges with resources to be utilised during the implementation phase. However, some aspects of the steps of the nursing process like formulation of the nursing diagnosis and evaluation of care rendered to patients are still a challenge for nurses.

The findings are congruent with that of Miskir and Emishaw (2018) also found that 58.5% of nurses agreed that the initial assessment of a patient is done before the planning step and that was always carried out before planning and that usually initial assessment is done within the first twenty-four (24 hours) of the patient' admission in the ward and patient' relatives are also considered. However, the study conducted in Ethiopia alluded that about 32.7% of nurses were implementing their activities in line with the nursing process approach considering all the steps used compared to 67.3% who have not implemented the nursing process in patient care (Zewdu, 2015).

Zamanzadeh, Valizadeh, Tabrizi, Behshid, and Lotfi (2015) identified that nurses have reflected in many cases that the nursing process is not executed systematically but often replaced by routine caring practices towards patient care. Furthermore, the study further posited that when nurses have inadequate skills in collecting history from the patient as a result of prolonged time needed to collect history. This affects the formulation of the nursing diagnosis as a result. Accordingly, incompetent initial assessment, nurses end up executing planning and with less attention given to evaluation activity.

According to Taylor, Lillis, LeMone, and Lynn (2011), the patient assessment includes collecting, checking, and analysing subjective data that were collected from patients and

relatives. The objective information regarding the patient's health status. Therefore, proper assessment of a patient has direct influences on the plan of care by nurses. Thus, a comprehensive assessment is important in managing interventions and evaluating the effectiveness of care rendered to the patient.

Results 4.7.2.2: Challenges encountered during the implementation of some steps of the nursing process

The finding for both qualitative and qualitative strands revealed that some steps of the nursing process are problematic and nurses are not consistent in implementing them. During the implementation of the nursing process in patient care, nurses lack the skill to formulate the nursing diagnosis. While most of the nurses implementing the nursing process are not sure of the formulation of the nursing diagnosis. This, therefore, affects the quality of care given to patients. The steps in the formulation of a nursing diagnosis are done with the identified problems identified during the assessment. Nurses have challenges with the formulation of the nursing diagnosis following an initial assessment of the patient, evaluation of care rendered to the patients, and re-planning for unresolved problems.

A study conducted by Agyeman-Yeboah, Ameyaw Korsah, and Okrah (2017) revealed that lack of knowledge on the nursing diagnosis is another factor preventing nurses from effectively using these nursing diagnoses. Similarly, Opare and Asamani *et al*, (2017) illustrated lower scores noted in the area of formulation of nursing diagnosis. The study further identified that many countries adapted the North American Nursing Diagnosis Association (NANDA) framework associated with the formulation of inappropriate nursing diagnosis. Similarly, Miskir and Emishaw (2018), in their study identified that 83% agreed that lack of preparedness or knowledge about the nursing process or some of its parts affects the implementation of the nursing process. Furthermore, the support that one should be knowledgeable about the process and its parts if the effective implementation is to be carried out.

Lack of theoretical and practical knowledge of the nursing process act as a barrier to its effective implementation (Julie *et al*, 2017). The findings are supported by the findings of

a study conducted in Ethiopia by Abdelkader and Othman (2017) found that there is inadequate in-service education on the nursing process and lack of education and training affected the application of the nursing process. It is possible to recommend the hospitals to look for resources to promote the awareness of their nurses on it and the utilisation. The study further recommends that hospitals need to strive for other ways that can bring improvement in the knowledge of their nurses on the nursing process and utilising the nursing process.

The findings of this research agree with a study conducted in Brazilian. The study highlighted that during the implementation of the nursing process, the evaluation of the data collection of the patient history, physical examination was the most common admission. Nevertheless, there were no nursing interventions or nursing diagnoses. Thus, the studies show that the failure and inconsistency in following the nursing process steps are interrelated (Mwangi, Meng'anyi & Mbugua, 2019; De Moraes Lopes *et al*, 2010). The researchers who are Hagos, Alemseged, Balcha, Berhe, and Aregay (2014), also alluded that even though the steps of the nursing process are dependent on each other, not all the steps of the nursing process were observed by the nurses during patient care.

This finding was also supported by a study proposing that nurses have challenges in correctly formulating nursing diagnoses. However, this occurs after assessing the patient and identifying the problems (Yilmaz *et al*, 2015). Similarly, the study conducted by De Moraes Lopes, Higa, Dos Reis, de Oliveira and Christóforo (2010) shows that when a nurse fails to obtain a proper history from the patient, or either spend a lot of time struggling to obtain the initial history from the patient, this can cause challenges in the formulation of a nursing diagnosis.

Shewangizaw and Mersha (2015) also reported that well knowledgeable nurses have a higher possibility to implement the nursing process than those nurses with low knowledge. The deduce is that the knowledge of the nursing process empowers nurses on how to assess, diagnose, plan, implement, and evaluate the nursing practice. Zamanzadeh *et al*, (2015) argue that a lack of appropriate knowledge and awareness among nurses is

another factor hindering proper implementation of the nursing process. However, Abebe, Abera, and Ayana (2014) noted that about (90%) of the nurses were having poor knowledge about the nursing process. In contrast, the majority of the nurses (94.6%) possess good knowledge and have the confidence to apply the nursing process in patient care (Mahmoud & Bayoumy, 2014).

The findings are in contrast with a study conducted by Karaka and Aslan (2018) which stated that positive views that nurses have about the usage of a nursing diagnosis have advantageous results on the assessment. Thus, to the identification of the patient problems leading to planning and improving the quality care rendered to the patient.

Results 4.7.2.3: Timeous implementation of the nursing process

The findings of the study indicated that nurses can implement the nursing process timeously. During the assessment step, the nurses were able to identify the patient's problems immediately. Some of the problems were a lack of knowledge about the condition of the patient, and the family history were identified. Proper planning for appropriate health education was provided. Health education forms part of the nursing process implementation where after assessing the patient, nursing actions that were planned are implemented timeously.

The findings are congruent with that of a study conducted by Van Hecke *et al*, (2013) which revealed that when patients have knowledge deficit about their condition, they need to be given more knowledge, and information before they can recognise or participate effectively in their treatment in promoting the healing. Poghosyan *et al*, (2013) postulate that patient teaching, and consideration can aid patients' understanding of their conditions. Therefore, the care instructions can be achieved through health education is an essential component in caring for patients effectively.

Results 4.4.2.4: Incomplete and inconsistent recording

Incomplete and inconsistent recording manifested by gaps in patients' records was identified as a common challenge that the nurses face when implementing the nursing process, in the public hospitals in the Limpopo Province. The nurses were failing to keep

clear and accurate records. The incomplete recording was related to a variety of factors which included lack of time, shortage of recording material, and shortage of staff.

The findings are consistent with that of a study conducted in Kenya by Mwangi, Menganyi, and Mbugua (2019). The scholars indicated that the in-patient files which were reviewed had incomplete, inadequate, or missing information related to assessment and the development of nursing care plans. Similarly, Muyakui, Nuuyoma, and Amukugo (2019) also explicated that there is inconsistency in how nurses record their nursing actions and this breaks the universal code of nurses concerning recording. The study concluded that challenges of recording were more related to clinical settings due to the practical and theory gap, hospital-related, and hospital staff-related factors.

Furthermore, Mutshatshi *et al*, (2018) outline that incomplete nursing records show no confirmation of care that was rendered to the patient, as there is a saying in nursing that 'what is not recorded is not done'. A study conducted by Semachew (2017), shows that 51.2% of nurses failed to record their nursing actions based on the care plan. On the other hand, (53.0%) of nurses did not evaluate their interventions. Lack of resources is a challenge in the public health care institutions. As it contributes to inaccurate or incomplete records and inconsistency in record-keeping (Logan, 2015; Slone *et al*, 2013).

Results 4.7.2.5: Importance of recording and activities to be recorded outlined

The nurses were knowledgeable of the importance of recording even though incomplete recording was a serious challenge. The nurse agreed with the belief that "in the nursing practice what is not recorded has not been done". The study revealed that nurses were aware that recording is important when implementing the nursing process, and admit that incomplete recording adversely affect the quality of patient care. The study findings outline that all activities done on patients are recorded, and recording should start from the first assessment of the patient, nursing diagnosis formulation, planning of patient care, implementation of nursing activities, and evaluation of the care given to the patient. Whatever is done on the patient is recorded in the patient's file as evidence that proves care was rendered to the patient.

Garba (2018) indicated that record-keeping is an essential primary instrument in nursing practice and records show the who, why, how, where, what, and when of patient care throughout the hospital stay. Incomplete nursing records do not provide evidence of care provided to the patient “what is not recorded is not done” (Mutshatshi, Mothiba, Mamogobo, & Mbombi, 2018). The implementation of the nursing process as related to the quality of care provided is based on properly documented nursing activities (Da Costa & Fernanda da Costa Linch, 2018). The findings are supported by Selvi (2017) who illuminated that records are viewed as a basis of proof of the accountability of each health-care provider in the provision of care, also an educational tool and a method of observing patient status.

Kamil, Rachmah, and Wardani (2018) state that the information provided in the nursing records as a complete sequence of the nursing process steps, extending from the nursing assessments, which are: diagnosis, nursing interventions, nursing care implementation and evaluation. They indicate the patient response and outcomes to care. Kebede, Endrisd, and Zegey, (2017) found that proper nursing recording is essential as it includes, and provides information on the planned care, patient observations, resolutions, nursing interventions, and patient outcomes. Asmirajanti, Hamid, and Hariyati (2014) encapsulate that the quality of nursing activities recorded the increase in patient satisfaction, patient safety, and cost-effectiveness.

Shihundla, Lebesse, and Maputle (2016), also mentioned that record-keeping is an important aspect of the nursing practice. Thus, that education needs to be reinforced to everyone accessing the records during patient care. Poor record-keeping is associated with poor care practices, leading to lawsuits and nurses need to consider its importance, as such a link is often a disadvantage to the nurse (Andrews & Aubyn, 2015). The nursing records which are of high-quality promote effective communication collaboration and teamwork among healthcare members (Coffey *et al*, 2015). Nursing records are the main clinical source to identify a patient’s condition, shows an essential role in evaluating the effectiveness of the care provision (Noureldin, Mosallam, & Hassan, 2014).

Instefjord, Aassekjaer, Espehang, and Graverholt (2014) also agree that nurses should record all essential information about the patient, as in the nursing practice “what is not documented is not done”. Furthermore, inadequate information compromises the continuity of care and the safety of the patient. The findings correspond with that of Inan and Dinc (2013) conveying that good records keeping is both a fundamental professional and a legal obligation of being a nurse. Nonetheless, a lack of documenting all patient information immediately after any nursing intervention, thorough recording of every detail relating to the patient’s case constitutes a medico-legal hazard. All nursing activity and documentation should be continuously directed, controlled, and evaluated by a nurse manager to ensure all activities are documented.

4.7.2.5 Lack of in-service training on implementation of the nursing process.

Nurses do not attend in-service training and workshops on the nursing process. Hence, this leads to poor implementation of the steps of the nursing process during patient care. This was again indicated as a lack of staff training and development policy in public hospitals regarding nursing process implementation. The findings show that there is no policy on the implementation of the nursing process. The nurses have not attended in-service training on the nursing process since there are no workshops conducted in the hospital.

The findings of this research are similar to a study conducted by Ojewole and Samole (2018) that also recommend that nurse managers should continue to arrange for in-service training for the nurses. Thus, to ensure that they are kept abreast with the information on the importance of utilising the nursing process. Furthermore, the findings are congruent with that of Miskir and Emishaw (2018) which highlighted that amongst factors that hinder the implementation of the nursing process implementation, the non-attendance of in-service training related to the nursing process was rated the highest at (75.5%).

Similarly, Ojewole, and Samole (2018), in their study suggested that continuing professional education on the nursing process the implementation of the nursing process,

and nurses' supervision should be commended as the use of the nursing process in hospitals continued to be poorly integrated into the activities of nurses. A study conducted by Kebede, Endrisd, and Zegeyea (2017) identified that in-service training is important and significantly interrelated with the practice of nursing care records. Thus, hospitals are to upgrade the knowledge of nurses in the nursing process through the provision of educating and training to improve the quality of patient care (Abdelkader & Othman, 2017). Mahmoud and Bayoumy (2014) suggested that for the nursing process to be operational, there should be practice training strategies for clinical nurses to reinforce the implementation of the nursing process in patient care.

Results 4.7.2.6: Lack of resources for the implementation of the nursing process.

The resources in terms of human and material supplies are crucial in the implementation of the nursing process. The shortage of staff was reported as a factor contributing to the non-implementation of the nursing process. In other instances, equipment and supplies such as stationery were not provided to facilitate the nursing process implementation and that affects the quality of care given to the patients. Lack of regular material supply to use the nursing process was suggestively connected with the implementation of the nursing process.

The findings correspond with that of Mwangi, Meng'anyi, and Mbugua (2019) where respondents echoed that the practice of the nursing process was a challenge as a result of manpower shortage, lack of supplies as they are overworked with paperwork, hence there was no time for patient care. The study recommended that health facility management needs to provide all the necessary human, material resources to support and enhance the implementation of the nursing process. Muyakui, Nuuyoma, and Amukugo (2019) alluded that the lack of resources for recording results in poor record-keeping practices and overall poor patient care. However, the recording remains central to the nursing process as all nursing activities are to be recorded.

Similarly, Baraki, and Girmay (2017) suggested that nurses who lack a constant supply of material resources to practice the nursing process were rated 95.1% less possible to implement the nursing process, compared to the nurses with a consistent supply of

nursing process material. Hence, both material and human resources are factors that affect the implementation of the nursing process. Abebe, Abera, and Ayana (2014) identified a shortage of the necessary equipment for patient care as another component that affects the implementation of the nursing process. The study further added that hospitals with required equipment needed for patient care were three times more likely to implement the nursing process than those with inadequate equipment. Thus, health institutions should strive to supply compulsory equipment for patient care.

Results 4.7.2.7: Lack of administrative and management support.

The findings discovered that there are poor management and administrative support for those nurses who are implementing the nursing process during patient care. The findings of the study further elucidated that nurses within various wards have developed a way of coping with the challenges in the implementation of the nursing process, by supporting each other where one is failing to understand.

The findings correspond with that of Mwangi *et al*, (2019) which found out that most of the health facility management team ineffectively supported nurses' implementation of the nursing process. In contrast, the unit in-charges was noted to be supportive to nurses in the implementation of the nursing process. The findings are congruent with the study conducted in Ghana which concluded that the nurse leaders should supervise and support nurses to practice what they were taught during their training to ensure professional independence in their practice (Agyeman-Yeboah & Korsah, 2018).

According to Opare and Asamani *et al*, (2017), the hospital management team ineffectively supported the implementation of the nursing process. Hediger, Muller-Staub, and Petry (2016); Wang, Yu, and Hailey (2015) confirmed the failure of nurses to embrace the fundamental concepts of the nursing process steps. Thus, the poor implementation is related to the lack of follow-up and support by head nurses, other administrators, and quality assurance departments. Besides, poor records of the nursing process can reflect a lack of appreciation by supervisors despite nurses' overwhelming workload. Abdelkader and Othman (2017), in their study also recommended that the motivation of nurses is

significant in improving the care development systems which further aid in promoting uniformity in implementing the nursing process.

Similar findings were noted in a study carried out by Shewangizaw and Mersha (2015), where the idea was that for nurses to provide quality of patient care, the management body of the hospital should engage themselves in the supervision, dissemination of information on the nursing process and evaluation of the implementation of the nursing process in the hospital. A study conducted in Bolivia also argues that the changes in a nursing process based nursing practice is not the sole responsibility of the nurses, but also requires the active participation of nurse managers (Granero-Molina *et al*, 2012).

Results 4.7.2.8: Need for a training programme.

The findings of this study indicated that nurses did not know the staff training and development policy in the hospitals. The findings further revealed that there is no training programme specifically for the nursing process in hospitals. However, there are audit teams in various hospitals that are trying to ensure that quality care is given to the patients. The audit teams are meant to assist nurses because after each audit they report to different wards. The study identified that there is an important need for nurses to have teaching sessions in the wards, where the aspect of the nursing process should be presented more often to keep nurses abreast of nursing process implementation. Thus, the nurses suggested that the development of a training programme can improve the implementation of the nursing process in public hospitals.

The findings are in line with that of a study conducted in Kenya which highlighted that the management in health care institutions should empower the nurses, through continuous education, workshops, seminars or updates on the nursing process to support and enhance the implementation of the nursing process (Mwangi, Meng'anyi & Mbugua, 2019). As a nursing service is dynamic, this requires determining an effective development of the nursing workforce through continuing professional training and development (Holloway, Arcus & Orsbon, 2017). Similarly, regular in-service training in the nursing process was viewed as important in the nursing practice (Opare & Asamani *et al.*, 2017).

The introduction of educational programmes enhances nurses' ability to use the nursing process to improve the quality of patient care. Similarly, Abdelkader and Othman (2017) commended that training programmes update and improve nurses in clinical health settings with the latest improvement in the nursing process implementation. The results of studies conducted in Iran and Sweden also backed that training increases motivation and teamwork amongst nurses that will eventually improve the nursing care recording practice (Ebrahimpour & Pelarak, 2016).

Wagoro and Rakuom (2015) agreed that following a training programme for nurses in the nursing process, there was a remarkable improvement in the quality of nursing care. Furthermore, Mutshatshi, Mothiba, and Mamogobo (2015) recommend that the need for formulation of a policy for in-service education that comprises of orientation and induction programmes stressing on the importance of record-keeping, and the nursing process in general. Sukanjanaporna, Sujivab, and Pasiphol (2015) alluded that continuing training programmes are vital tools to increase the skills of manpower, particularly the competence and expertise of employees when performing their responsibilities.

Results 4.7.2.9: Content of training programme outlined.

The findings were suggestive of the content of the training programme should entail. The suggestions were that there are various aspects of the steps of the nursing process which they think are problematic, and nurses feel they need to be trained on, to improve the implementation. The suggestion was that all steps of the nursing process should be taught, and the importance of record-keeping is ought to be included.

Muller-Staub, De Graaf-War, and Pans (2016) affirmed that more attention needs to be paid to the educating nurses on the recording which is vital in the implementation of the nursing process. Furthermore, training and organisational support on a recording of the nursing process will assist nurses to understand nursing process theory, and improve their clinical reasoning skills in its application to patient care. A study conducted in Australia also identifies that there is a need to educate nurses in aspects of the nursing process. Thus, the study further indicated that one of the most significant training needs

for registered nurses in practice is specifically on physical assessment skills which is the first step in the implementation of the nursing process (Birks *et al*, 2013).

4.7.3 Qualitative results without quantitative correspondence.

During the merging of the results, there were some sub-themes identified in the qualitative strand which have no similarities with variables in the quantitative strand. The sub-theme on the existing nursing team and their roles in the implementation of the nursing process did correspond with any variable. Various categories of nurses are involved in the implementation of the nursing process. Each category carries out various roles that together contribute to the patient receiving comprehensive quality care. During the implementation of the nursing process, various categories of nurses work as a team to accomplish their objectives.

Another sub-theme not corresponding to quantitative variables was the circumstances related to the lack of patients' honesty and health status during the implementation of the nursing process especially when collecting history from patients. Thus, sometimes they give wrong information and are uncooperative which can lead to incorrect nursing diagnosis. Some patients may give wrong information due to various factors like cultural issues and fear of stigma if they divulge their sensitive information, especially, if ethical issues such as confidentiality and privacy are not explained to them when collecting the history from the patients.

There are activities that the lower categories of nurses are restricted from performing alone without the supervision of a registered professional nurse. This is contained in their scope of practice. When junior categories perform activities they are allocated to do, a professional nurse has to check what was done and then countersign. Furthermore, the quantitative findings revealed nurses' competency rating level regarding the nursing process which was not corresponding with any findings in the qualitative strand during merging. In future other studies may be done to concentrate on those aspects which were not having similarities during merging.

4.8 CONCLUSION

The findings of this study postulated that various activities are done by nurses during the initial assessment of a patient when implementing the nursing process. Thus, nurses should be knowledgeable about all steps of the nursing process. There is an existing knowledge gap pertaining to some steps of the nursing process. These raises a serious challenge when implementing the nursing process in patient care. The implementation of the nursing process is done immediately after identifying a problem, and the initiation of health education to patients also their family.

There is a challenge of incomplete recordings and lack of consistency. Despite, the nurses being knowledgeable about the importance of record keeping. This study has highlighted that the nurses lack support from their managers during the implementation of the nursing process. There is an inadequate provision of resources to make the implementation a success. The hospitals lack a commitment in the training policy hence, there is no in-service training for nurses on the nursing process.

A nursing process training programme is needed for all professional nurses, as it will aid in promoting the development of critical thinking. It will aid with empowerment with knowledge, skills to ensure an independent, accountable, responsible and competent nurse practitioner as the anticipated end-result of the study. The content of the training programme will provide information on the implementation of the steps of the nursing process, record keeping principles, legal and ethical aspects, communication skills, and ethical issues in the nursing practice. The training programme to be implemented by the agent will concentrate on empowering professional nurses to be familiar with the practical implementation of the nursing process as a competency expected in the end-result in the terminus stage of the study.

CHAPTER 5

THEORETICAL FRAMEWORK THAT GUIDED THE NURSING PROCESS TRAINING PROGRAMME

5.1 INTRODUCTION

The findings of this study, literature control on the practices of nurses during the implementation of the nursing process in public hospitals in the Limpopo Province, South Africa were discussed in Chapter four. This chapter entails the findings of the research study concerning the Practice Orientated theory. The researcher obtained data through one-on-one interviews with 18 professional nurses and self-administered questionnaires completed by 242 participants. The data collected through interviews were audio-recorded, transcribed, and analysed using Tesch's open coding data analysis method. Thus, five themes, and their sub-themes emerged also the data were collected through questionnaires they were analysed using a computer software programme, viz. SPSS version 24. The two sets of data were merged and the interpretation of the findings was achieved (Table 4).

This chapter addresses Phase two of the study. This phase describes the theoretical framework, approach for a training programme for nurses, to improve the implementation of the nursing process in public hospitals in the Limpopo Province, South Africa. Phase two is compatible with the third objective.

- To describe a conceptual framework for the development and implementation of a training programme for professional nurses, implementing the nursing process in the public hospitals in Limpopo Province, South Africa.

The theoretical framework made the foundation for the development of a training programme for the nurses. The training programme is described in detail in the next chapter.

5.2 CONTEXT

The context of the study was conducted at the public hospitals in Limpopo Province, South Africa. The researcher included all the regional hospitals in the province, where

nurses working in the medical, surgical, and paediatric wards were used in the study. The participants and respondents were registered professional nurses who were implementing the nursing process in their day-to-day care of their patients.

5.3 THE THEORETICAL FRAMEWORK

The theoretical framework has a crucial purpose with the aim of explaining the concepts and analyse activities, while achieving the anticipated, and desired results (Dickoff *et al*, 1968). The practice-orientated theory as outlined by Dickoff *et al*, (1968) assisted with the explanation of concepts and analysing the activities that are aimed at understanding the goal of the development of a training programme. Furthermore, to improve the implementation of the nursing process in public hospitals in the Limpopo Province, South Africa. The components of the practice-oriented theory are the theoretical framework that grounded this study:

- Agent (who performs the activities);
- Recipient (who is the recipient of the activities);
- Context (in what context are the activities performed);
- Dynamics (interaction, challenges, findings);
- Procedure (what is the guiding procedure or techniques of the activities); and
- Terminus (what are the outcomes or end-results of the activities).

According to Dickhoff *et al*, (1968), the study list should answer the six essential questions about the activities that have to be performed and the answers that ought to have co-operative implications to one another during the implementation. The activities are described as follows:

5.3.1 The agent: Who or what performs the activity?

An agent is viewed as the individual who has a valuable impact, or a person who acts as a precipitating source of actions, and an individual who specialises in facilitating the change process during which new values, attitudes, and behaviour are promoted (Kamenye, lipinge & Van Dyk, 2016). According to Dickoff *et al*, (1968), an agent is a driving force that moves the practice towards achieving its goal, is also a person or thing that produces a result and takes an active role.

The findings of the study reflected that nurses are having challenges in the implementation of the nursing process as evidenced by difficulty in the formulation of the nursing diagnosis. Thus, a lack of evaluation of care given to patients, re-planning of unresolved problems, and poor record-keeping practices. The findings further discovered that there is no policy and training programme available to train nurses in the nursing process in various hospitals. As a result, there is no in-service training on the implementation of the nursing process.

The agent in this study is the researcher who is tasked with the responsibility for the development, coordination, and facilitation of the implementation of the nursing process. The training programme for professional nurses' in public hospitals in the Limpopo Province. The agent is the key person who is now assigned to the overall responsibility of planning, development, and facilitation of the training programme (Dickoff *et al*,1968). Figure 5.1 indicates the qualities, enabling or empowering potentials and interpersonal relations of the agent, which is described in detail below:

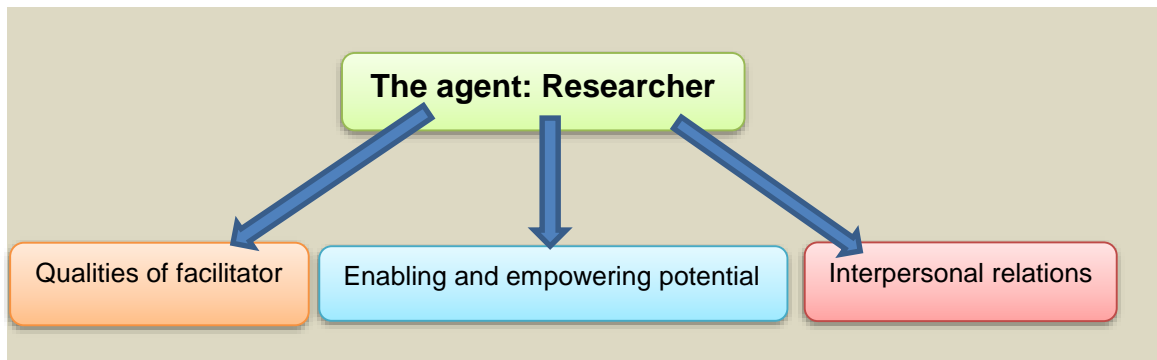


Figure 5.1 The agent

5.3.1.1 Qualities of the agent

The agent should have certain characteristics or personal qualities and should play an important role in facilitating the programme, to improve the implementation of the nursing process in public hospitals in the Limpopo Province. Within the context of this study, the agent is a registered nurse, also a nurse educator who has defined characteristics to

facilitate activities and registered with the South African Nursing Council. The agent has to possess the following qualities:

- *Ability to plan, implement, monitor, and evaluate.*

The agent has to be able to plan, implement, monitor, and evaluate the nursing process programme. The agent ought to expedite change by being knowledgeable, passionate, effective communicator, resourceful, ethical, mediator, and a good mentor (Nangombe, & Justus, 2016; Mothiba, 2012). In this study, the agent is a professional nurse specialist, a nurse educator with management abilities to plan, implement, and evaluate the training programme.

- *Knowledge*

The agent as a researcher has the methodical knowledge and research skill that enable her to conduct a study which explores the nurses' implementation of the nursing process, detected challenges that hinder the implementation of the nursing process. For instance, the agent should possess sound knowledge about the implementation of the nursing process. The agent should be able to incorporate her knowledge in guiding and supporting the recipients.

- *Competence*

Competence means the ability of a practitioner to integrate professional qualities including, but not limited to knowledge, skills, judgment, values, and beliefs required to perform as a professional in all situations also practice settings. Competence is an important quality that an agent should possess and depend on. It depends on the required basic knowledge, skills, and attitude that is needed to carry out professional roles and responsibilities efficiently (Ahanonu, 2015). The agent is a competent nurse practitioner with a general nursing speciality in Paediatric nursing science.

- *Management skills*

The agent has management skills and knowledge that enable her to plan and to cooperate with the nurses to develop a training programme to improve skills of the nurses who are

implementing the nursing process in patient care and holds a nursing management qualification.

- *Empathy*

Empathy involves a deep understanding of the feelings and thoughts that create up the inner experiences of the participants. This means that the agent should be sensitive and accepts the experiences of the participants without becoming too emotionally involved. The agent has to be empathetic so that she will be able to understand the feelings of the participants'. An empathetic attitude is important in creating a conducive environment for the recipients and can contribute to the achievement of goals (Nghipondoka-Lukolo & Charles, 2015).

- *Communication skills*

This is the ability of the agent to be able to listen well, and have a genuine interest in others' feelings. To be an effective facilitator one should possess interpersonal skills. Thus, the facilitator for this programme should have a pleasing personality and enjoys interacting with other people. This quality will assist the agent to lead the group towards achieving its objectives. Thus, to direct the group and motivate them to work together as a team.

- *Change agent*

According to Kamenye *et al*, (2016), the agent needs to be an individual who specialises in facilitating change. In the context of this study, the agent can develop and implement the training programme with guidelines for improvement of the nursing process in public hospitals. The agent ensures that the implementation of the nursing process by nurses is in line with the developed guidelines. The agent further influences other nurses, to become the future agents to have a positive influence on other nurses who will take over from them.

5.3.1.2 Enabling and empowering potentials

The agent is obliged to be an enabling or empowering tool where the agent should be able to execute activities to enhance knowledge, skills, and abilities to assist recipients to

address challenges. Consequently, this is hindering the delivery of quality health services in health care institutions. Enabling potentials includes:

- *Supportive learning environment*

According to Kamenye *et al*, (2016), when professionals feel unsupported they are likely to fail to provide optimal care to their patients. Thus, the agent will provide a supportive learning environment to assist the recipients' for effective learning that promote quality care rendered to the patients.

- *Courage*

Barry (2015) also indicated that the ability to challenge, inspire, enable, and encourage should be demonstrated by an agent who is considered to be a skilled and competent facilitator. The findings focus on empowering potential of the agent. The following qualities are viewed to be necessary for the agent to empower and support the recipients during the implementation process to be developed:

- *Confidence*

Fong and Snape (2013) alluded that the agent has to be able to empower the recipients. As a result, empowerment serves the purpose of improving the mental capacity of the recipient that enables to have the confidence to solve problems and to make informed decisions. Furthermore, empowerment inspires the feeling of autonomy, increases the ability of the recipient to think innovatively, and increases the capacity to cope with stress. All these practises together speed up the drive towards mental and emotional wellbeing of the recipients leading to constructive behavioural changes to practise.

5.3.1.3 Interpersonal relations

The agent should have good interpersonal relations and communication skills which facilitate effective implementation of the training programme. The study revealed that during the assessment step and throughout the other steps of the nursing process interpersonal relations and communication skills are important for nurses to work with patients as well as amongst themselves as a team. Thus, the researcher possesses

interpersonal relationships and communication skills which will be helpful in the implementation of the nursing process training programme.

- *Active participation*

The agent has to develop a means to ensure effective communication through participation. The recipients should be able to influence the personality and attitudes change and instill a spirit of professional development which in turn will benefit the recipients.

- *Teamwork*

The agent will also facilitate the development of guidelines for the implementation of the training to achieve its objectives. Thus, to show the group direction and inspire them to work together in the programme.

- *Leading abilities*

The agent has people management skills and this enables her to lead the group to achieve their objectives and to guide the group on the direction and motivate them to work together to enhance teamwork (Nangombe, & Justus, 2016; Kamenye *et al*, 2016).

The implementation of the developed programme was anticipated to assisting the professional nurses in becoming competent, accountable, and responsible professionals who will effectively implement the nursing process in patient care to achieve quality patient care. The programme will also enhance professional growth, and development together with the development of strategies to deal with challenges during the implementation process.

5.3.2 The recipient: Who or what is the recipient of the activity?

Dickoff *et al*, (1968) refers to a recipient as a person or persons who are receiving activities from the agent. According to the researcher, a recipient can be regarded as a person who is the beneficiary of the activities that are planned by an agent. This training programme was likely to address challenges experienced by nurses when implementing the nursing process in public hospitals. In the context of this study, the recipients are professional nurses who will benefit from participating in the training programme, where

their knowledge and skills will be improved when implementing the nursing process to render quality patient care. Figure 5.2 has indicated the qualities that the recipient should have, the outcomes of training, and the professional leadership roles in the implementation of the nursing process in public hospitals.

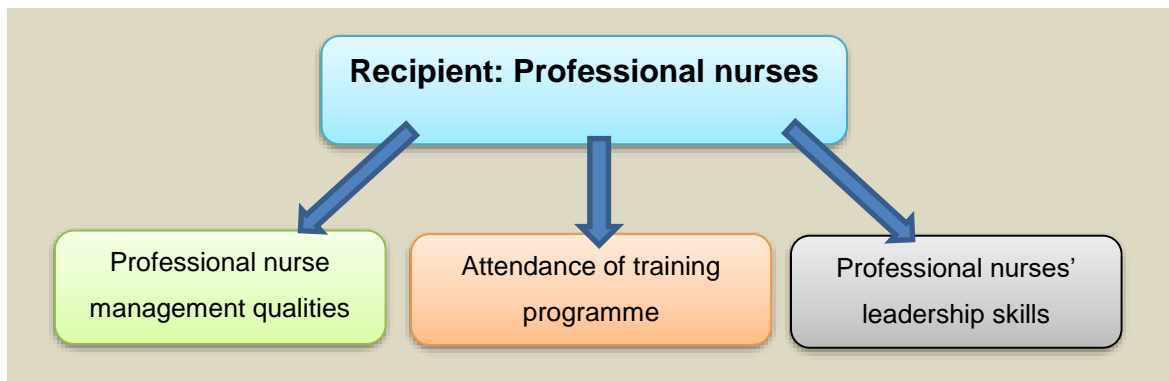


Figure 5.2 The recipient

5.3.2.1 Professional nurse qualities in implementing the nursing process

The training programme is developed to provide recipients with relevant knowledge, skills, abilities, and attitudes to improve implementation of the nursing process effectively. The professional job roles of the nurses has to be outlined as reflected in their job description to enable them to identify their gaps in the existing practice. The specific professional competencies need to be obtained from the training programme such as assessment, planning, implementation, evaluation, and recording concerning the implementation of the nursing process. The researcher is a registered professional nurse, nurse educator registered assessor, and moderator at an institution of higher learning and possesses the qualities relevant for facilitating the implementation of the nursing process.

5.3.2.2 Attendance of training programme

The findings revealed that nurses lack skills in formulating the nursing diagnosis and evaluation of care. Thus, such skills will be improved during the attendance of the training programme. The programme will also aim at empowering nurses towards changing their attitudes during the implementation of the nursing process approach to patient care. The contents of the training programme were informed by the recipients' practices in the

health care context. The programme will promote strategies to improve the nursing process implementation. Attendance of the training programme will bring about knowledge, skills, abilities in the performance of activities like collection of data from patients, formulation of nursing diagnosis, recording, and evaluation of care rendered to patients.

5.3.2.3 Professional nurses' leadership skills

According to Nangombe and Justus (2016), a successful programme requires nurses who are determined, committed, who are ready to effect change and transform it into the practice. The professional nurse needs to be able to thoroughly to explain and rationalise their actions during the care of their patients using the nursing process. The professional nurse as the recipient should take responsibility for all the actions during the performance of daily nursing actions and be accountable for their actions. The programme will also be addressed, the responsibilities and accountability aspects on the part of the recipients.

The nursing management has to motivate nurses to accept the change and to participate actively in the training programme and to create a favourable working environment. Nursing management should have all competencies that will promote the implementation of the programme in public hospitals which includes mentoring, coaching, and support to encourage staff. Moreover, ability to inspire confidence in staff, promotion of teamwork, create a good working environment and strategic planning. While organising and researching the knowledge to facilitate the implementation of the training programme.

The study highlighted that professional nurses lack skills, knowledge due to lack of training and were unable to formulate nursing diagnosis. The agent should enable them to acquire relevant knowledge, skills and empower them to deal with challenges of resources during the implementation of the nursing process. The recipient has developed leadership skills on how to manage resources effectively. The agent is expected to have good communication skills, good interpersonal relationships and apply ethical principles in the care of patients during the process to enhance quality.

5.3.3 The context: In what context is the activity performed?

The context refers to the environment where the activity is performed (Dickoff *et al.*, 1968). According to Nghipondoka-Lukolo and Charles (2015), context is a situation, a framework, a milieu, an environment where an activity is performed. The framework as the context of the activity does not only focus on physical aspects like time and space but both physical and nonphysical factors (Dickoff *et al.*, 1968). The study identified challenges of nursing process implementation in regional hospitals in the Limpopo Province. Figure 5.3 below indicates the context that is applied by the regional public hospitals in the Limpopo Province, where the nursing process training programme is to be implemented.

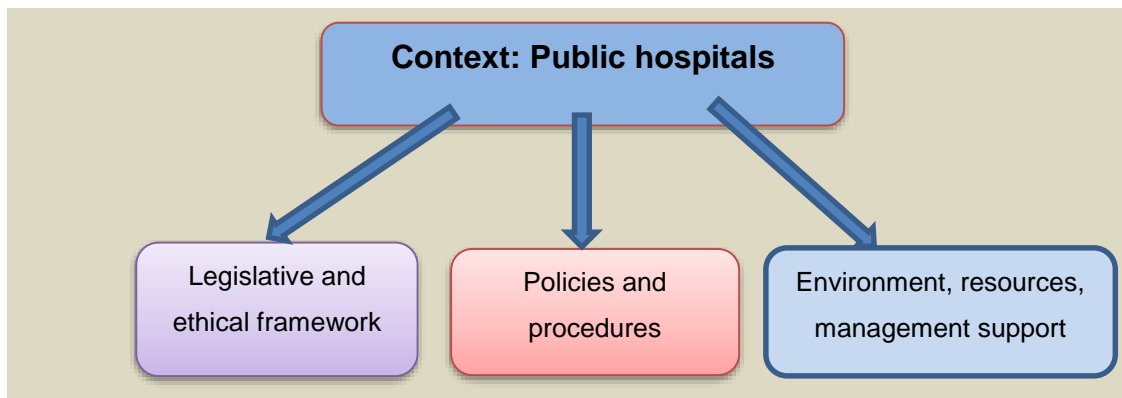


Figure 5.3 The context

The context consisting of the legal framework, policies and procedures, conducive and empowering the environment for the training programme. It is important to have an understanding of the legal and ethical framework of nursing practice in South Africa, because hospitals operate within this framework. The study reveals that nurses do not know about the policy of training and development on the nursing process within the hospital context. The link between the legal framework, the policies and procedures in the hospital context need to be known for supporting nurses in improving the implementation of the nursing process.

- *Characteristics of public hospitals*

Public hospitals are categorised as provincial, regional, and districts based on services they render. Regional hospitals which in this study are the context, provide unique services with specialities focusing on internal medicine, obstetrics, gynaecology, paediatrics, general surgery, and general practice. Range of hospitals experience different challenges such as shortage of staff, unavailability of material resources, lack of inadequately trained personnel. Thus, the strategies have to be adopted to improve patient care in hospitals.

According to Dickoff *et al*, (1968), a clinical setting is influenced by both the internal and external context of the agent. Internal context includes nursing professional skills, competence, knowledge of the nursing process and communication skills, policies, and guidelines. The external context includes those resources not only nurses that are needed in the support and maintenance of the agent' capacities (Kamenye *et al*, 2016)

5.3.3.1 Legislative and ethical framework

The context in which the activity is to take place, which in this case are public regional hospitals operates within the legal and ethical framework. The legal framework includes the Constitution of the Republic of South Africa, the Health Act, the Nursing Act, South African Nursing Council rules and regulations, policies and procedures at an operational level. The findings discovered that nurses work within the legal and ethical framework of their profession where the scope of practice is considered during the implementation of the nursing process.

Ethical issues, privacy, confidentiality, justice, beneficence, informed consent, should be adhered to by the institutions throughout. Hamid *et al*, (2016) concluded that hospital management should work towards ensuring a suitable and safe working environment to nurses by improving the accountability system and the provision of opportunities for the professional development for the nurses to improve their competency.

- *The Constitution of the Republic of South Africa*

The Constitution of the Republic of South Africa (1996), Chapter two, the Bill of rights outlines the right to health care, right to human dignity, and right to a safe environment. The constitution is the supreme law of the country, thus, health institutions have to abide by the rules when providing health care to the public.

- *The Nursing Act, Act No 33 of 2005 as amended*

The Act makes provision that a professional nurse is a person who is qualified, competent to independently practise a comprehensive nursing process and to the level prescribed in R2598. Whose is capable of assuming responsibility and accountability for such practise. The nurse practitioner should be able to contribute to the development of health care services that provide quality nursing care to the public.

- *The South African Nursing Council*

The South African Nursing Council (SANC) is a legal professional body which regulates nurses' training and practice in South Africa. They also advocate for quality patient care in hospitals. The SANC also conducts inspections and investigations of the nursing education institutions. The nursing education programmes and health establishments to ensure their compliance with the Act, and, the reports to the statutory body any non-compliance. SANC regulation R2598 entails the scope of practice for registered nurses. Whereas R387 stipulates the acts and omissions under which the SANC may take disciplinary steps against a nurse practitioner.

5.3.3.2 Policies and procedures

The effective implementation of the nursing process by professional nurses is guided by policies, and procedures in the institution, where the programme is to be implemented. The previously described qualities, characteristics of a professional nurse enable the nurse to be able to effectively implement the nursing process approach, during the care of their patients. Policies and procedures formulated in the institutions in line with the

state's legal framework are utilised by the nurse in achieving the set objectives. The policies and procedures should be good or favourable to the agent and the patient who should be provided with quality care. Nangombe and Justus (2016), indicated that when health professionals understand the standards and processes in the institution, they are likely to facilitate effective implementation of policies and guidelines.

5.3.3.3 Environment, resources, and management support

The implementation of an effective training programme requires a conducive working environment for training to yield good results. Therefore, no health care facility can function optimally without adequate material, human and financial resources. Thus, effective management of resources is vital to health care institutions, towards the achievement of quality, through the implementation of the nursing process.

The findings of the study exposed inadequate manpower, equipment, supply, and this affects the implementation of the nursing process in public hospitals. Furthermore, professional nurses were indicating a lack of management support and were not aware of the policies related to the nursing process and training. In contrast, the lack of resources and lack of management support. Despite all these challenges, the professional nurses have to create a conducive environment for effective implementation of the nursing process to improve the quality.

5.3.4 The dynamics: What is the energy source for the activity?

According to Dickoff *et al*, (1968), the dynamics are the energy sources of the activities within an individual or they are the internal motivational factors that promote success. In the context of this study, the dynamics are the challenges experienced by nurses during the implementation of the nursing process. The dynamics refer to the guiding forces that motivate the direction towards change and development. Based on the findings of the study, there are problematic steps in the implementation of the nursing process which include nursing diagnosis, evaluation, challenges of incomplete recording, poor management support to mention a few. If such challenges are not addressed, this may affect the implementation of nursing process and impact negatively on the quality of care.

The nurses were citing that a lack of management support and poor communication channels are discouraging them. The strategies to deal with factors affecting the implementation has to be developed to make the implementation a success. Figure 5.4 represents the dynamics of the activity which includes factors contributing to poor implementation and coping strategies. However, the clarification of the values of parties involved and requirements needed for attendance of the training programme

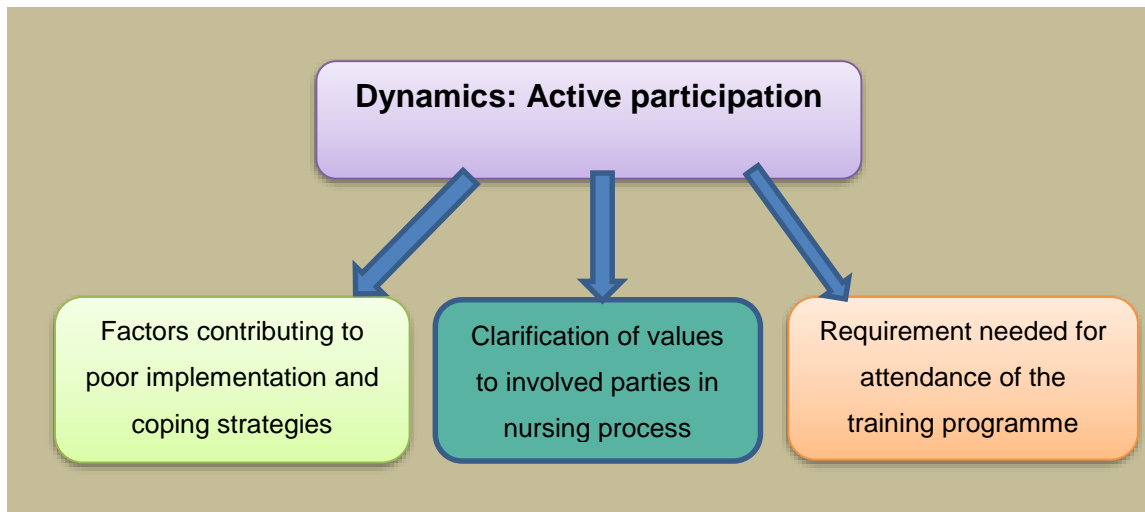


Figure 5.4: Dynamics

5.3.4.1 Factors contributing to poor implementation and coping strategies

The agent, the recipient, and the context should have ownership of these guiding forces. Thus, to drive the training programme to empower professional nurses with knowledge, skills, attitudes, and values to implement nursing process effectively (Mothiba, 2012). The study identified challenges in the implementation and strategies to cope with the challenges which are empowering professional nurses through a training programme has been developed. The training programme is aimed at increasing the nurses' skills, knowledge, abilities and to deal with their challenges professionally.

5.3.4.2 Clarification of values to involve parties in the nursing process

The values of every participant in the process, the agent, the recipient, and the context should be clarified as participants can hold different values (Nangombe & Justus, 2016).

The problems experienced can be seen as a negative force that could be directed positively by the agent as an inspiration to achieve the set goals for the training programme. The importance of this clarification of values is to create a common understanding of the purpose of implementing the nursing process in patient care.

5.3.4.3 Requirements needed for attendance of the training programme

The prerequisite for professional nurses to attend the training programme is ought to be guided by the training policy within the hospital, and the training needs that were identified from the professional nurses. The nursing process training programme attendance requires nurses to have basic general nursing knowledge to participate in the programme. The training programme has to address challenges affecting the implementation of the nursing process and impacting on the quality of patient care.

Nangombe and Justus (2016) alluded that the training is a requisite to emanate from the identified competencies, skills, and knowledge gaps hindering the quality. In this instance, training should focus on the findings of this study. The findings in this study have reflected that the challenges experienced by professional nurses were institutional, management, and personal all needed to be attended to during the training programme.

Thus, to wrap up on the dynamics, active participation was viewed as a dynamic process where issues of leadership, competencies, responsibility, accountabilities, and values were addressed for professional nurses to implement the nursing process effectively. The agent has to facilitate realisation of the goals through learning outcomes, assessment criteria, and activities that nurses are engaged with in the training programme.

5.3.5 The procedure: What is the guiding procedure of the activity?

A procedure is an orderly way of completing tasks and is also regarded as a general rule guiding the activity comprised of devices and protocol enabling the agent to achieve the goal (Kamenye *et al*, 2016; Dickoff *et al*, 1968). According to Justus and Nangombe (2016), procedures are regarded as processes that are used to report certain challenges or direct the actions to implement a policy or programme. Within the context of this study,

the procedure is the training programme that was developed and implemented at the regional public hospitals in the Limpopo Province. The primary purpose is to provide nurses with knowledge, skills and abilities to improve implementation of the nursing process approach in patient care.

Figure 5.5 indicates the procedures with learning context, various teaching strategies, and the guiding procedure in the development of a training programme. The procedure is essential to provide more information to allow the activity to be carried out. Whilst it can be useful to defend the agent, the recipient, and the organisation. The educational programme, and the guidelines addressed the learning gaps of professional nurses were identified during the data analysis in the situation analysis phase. The procedure relates to the sequence of actions to be followed to accomplish the set goals of the training programme. These sequences should be followed to accomplish the outcomes. The procedure needs to detail exactly what to be done to avoid shortfalls like confusion on the topics to be dealt with during the implementation of the programme.

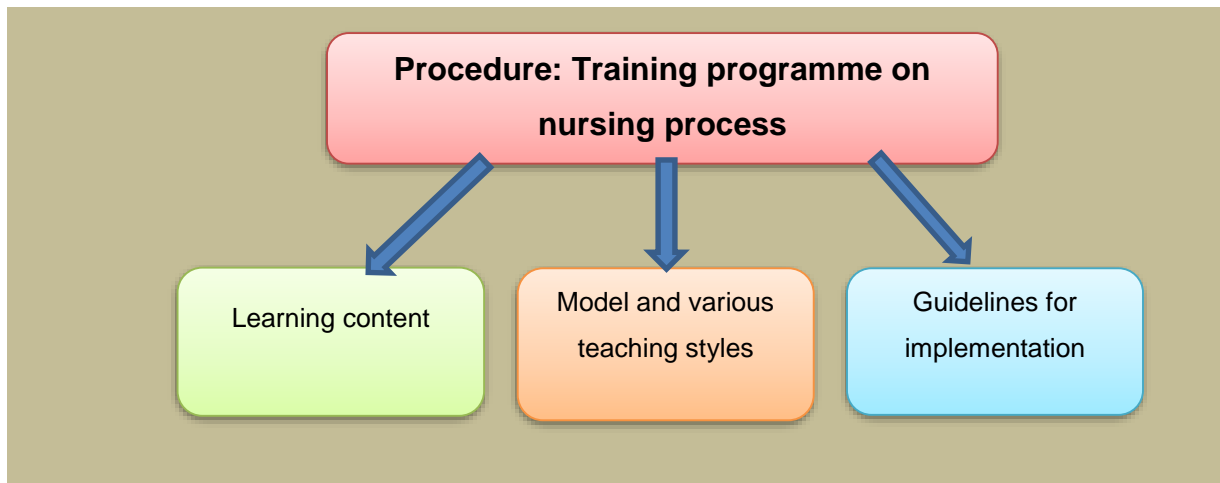


Figure 5.5: Procedure

5.3.5.1 *The learning content*

The training programme will address the suggestions given by the participants during the situational analysis phase. The following aspects reflected in Chapter four were taken into

consideration as suggested. During the implementation of the programme and they were included in the programme content:

- Advantages of using the nursing process in patient care;
- Steps of the nursing process;
- Application of the steps of the nursing process in patient care;
- Ethical and legal aspects related to the nursing process;
- Principles of record keeping;
- Importance of record keeping; and
- Communication skills both verbal and written.

Furthermore, nurses need empowerment on how to effectively address issues of shortage of resources, management of such resources, staff workloads, and interpersonal relations. The content of the training programme was developed to improve the implementation of the nursing process in public hospitals.

5.3.5.2 The model and various learning styles

The training programme will be facilitated by the researcher who is a professional nurse with experience in clinical nursing practice, and an educator in General Nursing Science with expertise in the nursing process. The specialisation in child nursing and experience will assist nurses to cope with challenges encountered during the implementation of the nursing process. Malcolm Knowles' Adult Learning Theory was utilised to facilitate the training and included the following characteristics:

- *Self-directedness*

Adult learners are more receptive to learning if the aspects of training are relevant to the tasks they perform in their working environment. Active participation during the training programme will be encouraged through self-directed learning. The researcher as a facilitator during the implementation of the training programme will guide and direct the professional nurses to identify the value for attending the training.

- *Motivation to learn*

During learning, adult learners are internally motivated and the motivation increases when what is learned is clear, relevant to real-life situations, and the motivation to learn related

to their work (Pappas, 2014). In this context, professional nurses will be motivated to demonstrate how planned learning will benefit them during the care of their patients.

- *Adult learner experience*

The life experiences of the recipients will be considered as it plays a major role in the learning process to improve one's skills. The professional nurses have experience in implementing the nursing process in patient care. Thus, the training programme should target the identified training needs to ensure that they are actively involved.

- *Readiness to learn*

Learning for adults is done to achieve a particular task and is based on readiness to learn. Professional nurses as adult learners will be willing to learn new skills and knowledge on the nursing process. This is part of professional development preparing them for new challenges experienced in the process.

The agent will use the facilitation approach aimed at engaging the learner to increase their knowledge by acting together with the colleagues. Reflective teaching which will help in reflecting the past experiences of the facilitator to plan for the future. Work-related problems will be used during scenarios, activities and interaction with others to promote Problem Based Learning (PBL). The agent will also use small group activities which will enable the recipient to mix with the co-workers. Thus, to complete activities together. This will increase the understanding on the application of the given task.

5.3.5.3 Guidelines for programme implementation

The nursing process training programme required guiding principles for the effective achievement of its objectives. Dickoff *et al*, (1968) refer to the fifth part on the survey list of the Practice Orientated theory as the guiding procedure, technique, or protocol for the activity. The procedure is essential to provide more information to allow the activity to be carried out. It can be useful to defend the agent, the recipient, and the organisation (Dickoff *et al*,1968). The guidelines for the training programme focus on the following topics:

- The purpose of the training programme based on the results of the practices of nurses during the implementation of the nursing process;
- The programme outcomes which outlines the expected training to be achieved;
- The content of the training programme based on the suggestions given and to cover all the learning outcomes;
- The methods used to facilitate the training programme; and
- The method of assessing whether the outcomes were achieved or not.

In closing, the training programme was a basic need for nurses in the public hospitals, and all suggestions given during the situational analysis were taken into account. The methods of teaching were described, on how they will aid in the development of the recipient. The implementation guidelines were also reflected.

5.3.6 The terminus: What is the endpoint of the activity?

The terminus is the final or last activity of the process, it is the last stop or the finishing point (Nangombe & Justus, 2016; Dickoff *et al*, 1968). In this study, the terminus is the result of the training programme which is a competent, responsible, and accountable to professional nurses who can effectively implement the nursing process in patient care. In figure 5.6 below, the terminus is indicated which will confirm if the objectives of the activity were achieved or not.

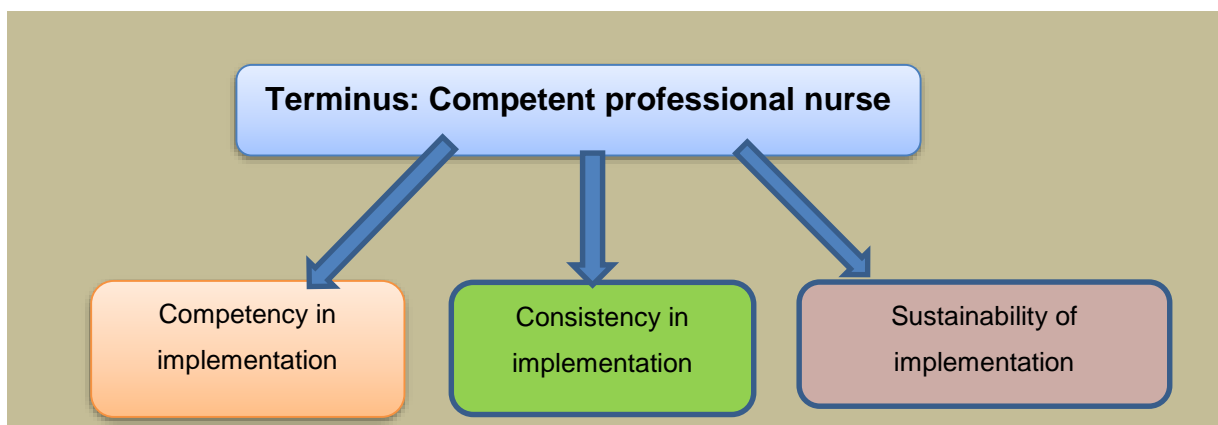


Figure 5.6: Terminus

This includes competency, consistency, and continuity in the implementation of the nursing process. The professional nurse on completion of the training should be awarded a short course certificate on the implementation of the nursing process.

5.3.6.1 Competency in implementation

The results of this study will be achieved, if the professional nurses are competent, shows personal development, are responsible and accountable. The findings will be evaluated through an assessment to check if it achieved the desired goals.

5.3.6.2 Consistency in implementation

The professional nurses will be given an opportunity to work independently, utilising the nursing process in patient care with minimal monitoring and assessment by the nurse managers for consistency and continuity.

5.3.6.3 Sustainability in implementation

The implementation of the nursing process needs to be sustained throughout the nursing practice. Sustainability in the implementation of the nursing process can be monitored through nursing audits, monitoring and evaluation by the nursing management to enhance the effective implementation of the nursing process. Nurses have to be provided with adequate resources needed for effective implementation of the nursing process and this will ensure continuity.

A competent, responsible, and accountable professional nurse implementing the nursing process effectively constitute a terminus of this study. The nurse leaders has to supervise the nurses to put into practice, what they were trained during their training. This is implemented, to ensure that there are continuity and consistency in implementing the nursing process approach to patient care in public hospitals. The nurses should at all cost ensure their professional autonomy in their practice of the nursing profession. The nurse managers should have strategies in place to ensure the sustainability of implementing the nursing process in patient care is maintained.

5.4 CONCLUSION

This chapter presented six essential elements for programme development and implementation theory as outlined by Dickoff *et al*, (1968) and their application is based on the findings of the study as presented in chapter four. The chapter highlighted that the agent is the researcher with qualities, enabling, empowering potential and interpersonal skills to facilitate the training programme.

Recipients are professional nurses with management skills, leadership skills and who are required to attend the training programme. The context of this study is the public regional hospitals with their policies, procedures, operating within the ethical and legal context. The environmental resources responsible for the programme to be implemented. The dynamics that are the driving forces include factors hindering effective implementation of the nursing process. The clarification of nurses' roles and the requirement set to qualify and to attend the training programme. The procedure includes the learning content, teaching strategies, and guidelines for implementing the nursing process training programme. The terminus is the result that includes the competency expected. The consistency in implementation and sustainability strategies in the implementation of the nursing process.

CHAPTER 6

A CONTEXT-SPECIFIC NURSING PROCESS TRAINING PROGRAMME FOR PROFESSIONAL NURSES

6.1 INTRODUCTION

Chapter four presented the findings of the study, Chapter five described the theoretical framework by Dickoff *et al*, (1968) whereby the activities to support the development of a training programme for professional nurses aimed at improving implementation of the nursing process were presented. The activities include the agent, recipient, context, dynamics, procedure, and the terminus were used in this study. The findings based on merging the qualitative and quantitative data were the foundation for the development of the context-specific training programme for professional nurses, who are implementing the nursing process in public hospitals. This chapter is intended to describe the training programme that would guide, aid to improve the knowledge and skills of professional nurses during the implementation of the nursing process in public hospitals during patient care.

6.2 OBJECTIVES OF THE STUDY WHICH GUIDED THE DEVELOPMENT OF A TRAINING PROGRAMME

Objectives one and two of the study were to:

- explore and describe the practices of professional nurses when implementing the nursing process in public hospitals in the Limpopo Province, South Africa.
- assess the training needs of professional nurses when implementing the nursing process in public hospitals in the Limpopo Province, South Africa.

Objectives one and two that are in Phase one of the study were aimed at situational analysis to provide a baseline understanding of the practices and assessment of training needs of professional nurses during the implementation of the nursing process. The training programme were developed based on the findings that emanated during Phase one of the study.

Objective three was to:

- describe a conceptual framework for the development and implementation of the training programme for professional nurses implementing the nursing process in public hospitals in the Limpopo Province, South Africa.

The literature reviewed assisted the researcher to include aspects that guide the development of a nursing process training programme for professional nurses during Phase two of the study. Dickoff, James, and Wiedenbach (1968) theory guided the study that includes six activities discussed in Chapter five.

Objective four is in phase three of the study it includes to:

- develop a training programme with guidelines for professional nurses who are implementing the nursing process in public hospitals in the Limpopo Province, South Africa.

The research findings on practices of nurses, and assessment of training needs for professional nurses during the nursing process implementation shaped the content of the training programme. The professional nurses, therefore, identify strategies that could improve their implementation of the nursing process based on their context.

Objective five that is in Phase four of the study is to:

- implement the training programme for professional nurses on the implementation of the nursing process in public hospitals in the Limpopo Province, South Africa.

6.3 THE RATIONALE FOR DEVELOPMENT OF A TRAINING PROGRAMME FOR PROFESSIONAL NURSES

The motivation for the development of the training programme originated from experiences, and the insufficient training that the participants indicated to enhance the quality implementation of the nursing process during patient care. The researcher identified that there was no training programme specifically for nurses in the Limpopo Province for improving implementation of the nursing process in the public hospitals. Thus, a programme was developed to address the gap. The findings of this study revealed that the programme focuses on the practical implementation of the steps of the nursing process. The legal framework for the implementation of the nursing process, ethical

issues, interpersonal skills, and record-keeping. The context-specific nursing process training sections will be conducted in line with the South African Qualification requirement for accreditation in the regional hospitals in the Limpopo Province.

The findings of the study exposed the activities performed during initial contact with patients. The challenges encountered during implementation of some steps of the nursing process such as formulation of the nursing diagnosis, evaluation, the timeous implementation of the nursing process, incomplete, inconsistent recording and activities to be recorded. A lack of in-service training on implementation of the nursing process, lack of resources for the implementation of the nursing process, lack of administrative and management support, the need for a training programme and the content of training programme were outlined.

6.3.1 Benefits of the developed programme

The nursing process training programme had benefits that are both short term and long term which includes the following:

- *Benefits to the community*

The benefits to the community include the general improvement of the quality of care that will be rendered to patients. This is when nurses are well informed of the practical implementation of the nursing process. The programme will also benefit the community by ensuring a high patient and family care whilst they will be satisfied on the rate following the care delivery. The benefit to society also includes meeting the anticipations and health needs of the patients.

- *Benefits to recipients of the activity*

The nurses will be equipped with additional knowledge also skills that will motivate them to render quality patient care. The improvement of lifelong learning amongst nurses will also stimulate participants' interests in following positions in nursing process audit.

- *Benefits to the profession (body of knowledge)*

The programme is the first of its kind as it covers the nursing process aspects that will gather valuable and dense information. Through a research project that is increasing in

the body of knowledge in the nursing profession to improve knowledge, skills to ensure quality health care in public hospitals of Limpopo Province.

6.3.2 Adult learning theory by Malcolm Knowles

The researcher in Chapter one presumed that for the implementation and validation of a training programme aimed at achieving the set goals, an adult learning theory is appropriate because nurses are adult learners. Malcolm Knowles explains andragogy as the art and science of adult learning. However, Kearsley (2010), describes andragogy as any form of adult learning.

Table 6.1 Application of Knowles Adult Learning Theory in the programme

Knowles 'characteristics of an adult learner	Knowles' principles of adult learning	Knowles' adult learning theory	Application in the learning programme
Practical and more results-oriented	Adult learners enjoy learning subjects that have direct relevance influence on their work and personal life.	Adult learners are ready to learn if the activities they are learning during training can assist them and be applied in their working environment and not just theory they cannot apply.	The learning activities during training will clearly show the learners how the training would advantage them in the implementation of the nursing process effectively in their area of work.
Self-direction	Adults learners should be involved in the development and assessment of their instructions.	Adults learners are self-directed, take responsibility for their lives, make own their decisions, and have control over their learning. Adult learners enjoy learning activities that address their needs.	During training learners will be given a chance to work in groups to ensure active participation in aspects that were having knowledge gaps during the interviews,
Less is being open-minded	Adult learners enjoy learning subjects that have direct relevance and influence to them	Adult learners are less open-minded and can resist new changes due to their profound life experiences and this sometimes acts as a competitor to their learning.	The facilitator should encourage learners to be open-minded to stimulate critical thinking and to take the training a platform to increase their current knowledge and skills.

	to their work and personal life.		
Knowles' characteristics of an adult learner	Knowles' principles of adult learning	Knowles' Adult Learning Theory	Application in the training programme
Slower learners have integrative knowledge	Adult learners' experiences and mistakes form the foundation of the learning activities.	Adults learners are mostly slower in learning new things than young ones due to age, but, they have more integrative knowledge, as they combine the current knowledge with their experiences including mistakes.	The facilitator is ought to be patient and work at a pace that adult learners can follow, allowing them to integrates the learning to what they already know, and encourage learners to share their experiences and faults.
Use of personal experience as a resource	The adult learner' experiences and there are including mistakes form the foundation of the learning activities.	Adult learners have experiences from their work situation and therefore the training have to accommodate their experiences. It has to be relevant to their work aimed at developing them professionally.	The training will focus on the activities of the nursing process that they are performing daily.
Motivation	Adult learners enjoy learning subjects that	Adult learners are dependent on extrinsic and intrinsic motivators that	The facilitator has ensured that there are extrinsic motivators and should

	have direct relevance and are influential to their work and their personal life	motivate them on the need to learn with interest.	also encourage adult learners to be intrinsically motivated for them to be more eager to learn.
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6.3.3 The model of choice for the development and implementation of a nursing process training programme

The nursing process training programme development and implementation adopted the **ADDIE** model. The model has been around since 1975 and evolved into a dynamic structure where the last phase was changed from “Evaluation and Control” to “Evaluation”, thus become known as the ADDIE model. The model is an orderly instructional design with five phases: Analysis, Design, Development, Implementation, and Evaluation. They provide a basis for training that is simple in determining practice areas that require improvements (Branch, 2009; Watson, 1981).

The model is also seen as an iterative feedback model as the results of the final phase are joined to the original phase to close any existing gap. Furthermore, to refine the learning product (Branch, 2009; Watson, 1981). ADDIE model has often been called a process model in that all parts are interconnected, and changes in one step may affect the other steps (Watson, 1981). The rationale for selecting the ADDIE model is to guide the process of developing the nursing process training programme that is intended at offering knowledge and skills to nurses on the implementation of the nursing process during patient care.

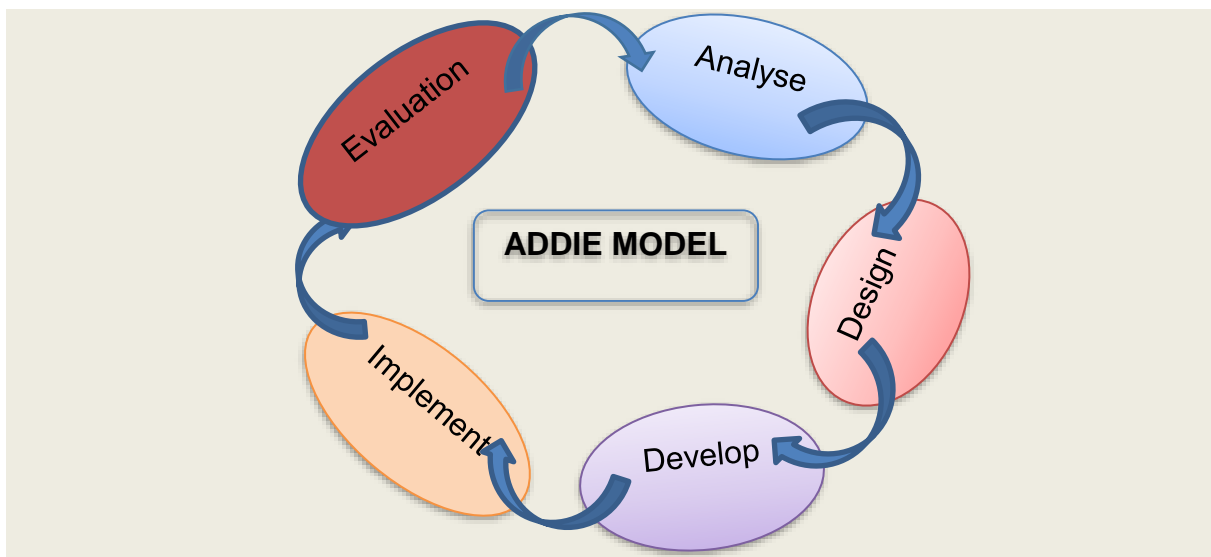


Figure 6.1 Programme development phases adopted from the ADDIE model

- *The analysis phase*

This phase involves the situational analysis which covers Objective one and reflected in Phase three of the study. This is to identify the practices and training needs of professional nurses to improve the implementation of the nursing process. The knowledge gap was identified, potential causes and possible training solutions were explored through a mixed methodology. Leading to the development of a training programme. Purposive sampling technique was used to select professional nurses to ensure that the developed programme is relevant for the target group (Branson *et al*, 1975; Watson, 1981).

- *The design phase*

The design phase includes the mapping out of the plan on the training programme structured. As it helps with the learning outcomes, the training content, teaching methodology, instructional strategy, activities, and assessment criteria to meet the training needs included. Furthermore, this phase is like the blueprint of the training solution to shaping the training (Cheung, 2016). The merged findings of the qualitative and quantitative strands informed the development of a theoretical framework based on the Practice-Oriented Theory of Dickoff *et al*. (1968) which guided the study.

- *The development phase*

This phase includes the creation and writing of the programme, the development of the course materials used in the programme. The contents included in the purpose statement, outcomes, objectives, prerequisites, learning methods, learning milieu, activities, assessment techniques used in the training including the development of guidelines for effective implementation of the programme for public hospitals (Branson, Rayner, Cox, Furman, King, Hannum, 1975; Watson, 1981).

- *The implementation phase*

This is the actual application of training and it will run efficiently if all phases were well-prepared. The professional nurses who participated in the study were invited to attend a workshop to confirm whether the findings of the situational analysis phase address their

training needs during the implementation of the nursing process. This also provides a platform for nurses to have their say before the programme is finally introduced in the public hospitals (Branson *et al.*,1975; Watson, 1981).

- *The evaluation*

According to Hannum (2005), the evaluation phase includes a review of how the rest of all the previous phases were carried out and obtaining reactions from the participants in the evaluation of the effectiveness of the programme. The evaluation aims to verify whether the training programme has achieved its intended objectives. Each participant will be given an evaluation tool to rate the whole training programme. Participants will also be engaged in a focus group interview to get their input. However, the feedback given will be used to identify if the programme achieved the objectives. Thus, to also see if there is a need for adjustment and further improvement.

6.4 THE DESIGNING OF A CONTEXT-SPECIFIC TRAINING PROGRAMME FOR PROFESSIONAL NURSES

The training programme is developed for a regional hospital to improve the implementation of the nursing process when providing care to the patients. Based on the findings of the situational analysis in Phase one of this study, the training programme assumed that it has to address the challenges encountered by nurses in their work concerning the implementation of the nursing process. The context-specific training programme was structured as a short training programme for professional nurses in nursing care units grounded on the SAQA guidelines for programme development. An outline of the context-specific training programme for professional nurses included:

6.4.1 The purpose of the training programme

The primary purpose of this training programme is to equip professional nurses with the knowledge and skills needed to improve the implementation of the nursing process during patient care. During the development of themes and sub-themes, these competencies were explained indicating a gap that should be covered through a training programme. Thus, to also achieve this purpose professional nurses are empowered as leaders of nursing care, to also share the knowledge with the rest of the other nursing categories.

6.4.2 Outcomes of the programme

The outcomes of the training programme are linked to the primary purpose, to ensure that the expected goal and objectives are attained. The end-product of the training programme is a competent professional nurse who can effectively implement the nursing process during patient care. The product of the programme has to be empowered to work as an independent professional nurse when implementing the nursing process during patient care leading to both personal and professional growth and development.

6.4.3 Prerequisites for attending the programme

The following prerequisites or inclusion criteria were considered before any professional nurse can be allowed into the training programme:

- Professional nurses should have experience, knowledge, and skills in the implementation of the nursing process during patient care;
- All newly appointed professional nurses should be included in the training programme to familiarise them with the practical implementation of the nursing process;
- The nurse who should have undergone training in the basic nursing sciences degree or diploma which included General Nursing Science and Midwifery; and
- Registered with SANC as a professional nurse and implementing the nursing process during patient care.

The above-listed inclusion criteria were used to ensure that all professional nurses participating in the programme were implementing the nursing process in the regional hospitals and their training will aid in improving the quality of care given to patients.

6.4.4 Strategies to implement the nursing process training programme

Various strategies were adopted to the training of nurses on the implementation of the nursing process. The researcher will use a variety of teaching and learning methods which includes the following:

- *A contextual approach to learning*

The contextual learning method was used in this training programme based on the findings of the study where a context-specific training programme on the implementation

of the nursing process was suggested. The facilitation of the training programme was conducted in the regional public hospital setting because that is where nurses are implementing the nursing process. The context influences learning and can encourage change (Killen, 2010). The study identified some of the challenges during the implementation of the nursing process then addressed in the real-life context, where they are happening.

- *Problem-based learning*

The approach was used in this training to enable participants to solve work-related problems. Scenarios or case studies were created in the programme and presented in the learning activities, to bring work-related problems. The participants were encouraged to develop problem-solving skills and solve work-related problems presented in scenarios during the learning process. Problem-based learning offers the participants in the training programme an opportunity to actively participate in own learning rather than being a passive participant in the process.

- *Lecture method*

The lecture method is one of the oldest traditional face-to-face methods of training where the facilitator transmits information to recipients. The advantage is that it stimulates and motivates adult learners to make further inquiries on the subject matter (Mohan, 2010). The lecture method was chosen in this training programme, because it is an effective way to introduce information to a group of people and that the facilitator can be able to clarify some concepts. To also give participants a chance to interact and share more information in light of their experiences. The lecture method requires a lot of creativity to make the subject interesting and stimulating to the learners (Klopper, 2011).

- *Small group discussions*

This learning style was adopted for the participants as adult learners and are expected to learn best by interacting in groups to enhance understanding and the application of what they have learned. During a small group discussion session, the facilitator can function as an anchor-person for students' discussion of issues that are relevant to clinical problem-solving. Small group discussions were chosen as they stimulate adult learners

and encourage active participation (Hadimani, 2014). Moreover, to ensure that professional nurses are involved in such discussions to promote interaction and stimulate discussion.

- *Experiential learning*

This method of learning focuses on the simulation to create a replica of a real-life situation to give learners more insight in their work practice. In experiential learning, students benefit by developing more skills as they engage in various activities in a real-life environment, learners gain more knowledge and skills from their colleagues' experiences. Experiential learning gives the learners a chance to participate and learn from one another based on individual experiences (Fenske, Freeland, Price & Brough, 2015). Experiential learning was opted to encourage professional nurses to use their work experience and to share such experiences amongst each other.

- *Role-play*

According to Hasan (2011), role-play creates an environment that enables discussion of difficult issues and is an effective training method as it produces awareness. The role-play was also used for interpersonal and communication skills development, as well as conflict management, resolution, and group decision making. In role-play, the participants are awarded a chance to portray the role of somebody to reinforce learning. The portrayal of roles would make the learning experiences to be as real as possible like real-life situations. This would make the learning process more stimulating for professional nurses to be actively engaged in the discussion following these role-plays. Role-play also encourages students to be actively explorative, bring theory nearer to real health care situations, and is an effective learning strategy to stimulate passive learners and promote effective communication (Cogo *et al*, 2016; Toghian, Chaharsoughi, Ahrari, & Alikhah, 2014).

- *Facilitation*

Facilitation is a process whereby adult learners are involved in acquiring knowledge through active interrelating with colleagues and facilitators during training. During the learning process, each learner needs to be guided by someone and the facilitator has to

play the role of being a guide but not reinforcing learners what they are not willing to learn. According to Meyer and Van Niekerk (2008), the facilitator has to be able to simplify the learning material for learners to understand. Thus, the training programme in the nursing process was facilitated by an individual with appropriate qualifications and skills. The facilitator should also reassure and motivate the professional nurses throughout the programme to assist professional nurses to implement the nursing process effectively.

6.4.5 The learning environment

The learning environment for the training programme was the public regional hospitals in the Limpopo Province. This is where professional nurses are implementing the nursing process. The nursing process is being implemented in each ward and professional nurses are the leaders in the implementation of the nursing process to promote quality patient care. The learning activities planned indicate how the participants benefit from the training programme because adult learners need the motivation to learn. The facilitator has to consider external factors that encourage the willingness to learn amongst participants.

According to Killen (2010), a positive learning environment motivate learners and create conditions where learners will be able to maximise their full potential through the following:

- Creation of an environment which is safe both physically and psychologically;
- Structuring of the learning experiences to guide learners towards long term goals;
- Develop trust in the learners and give them the opportunity for active participation in the classroom like setting classroom ground rules; and

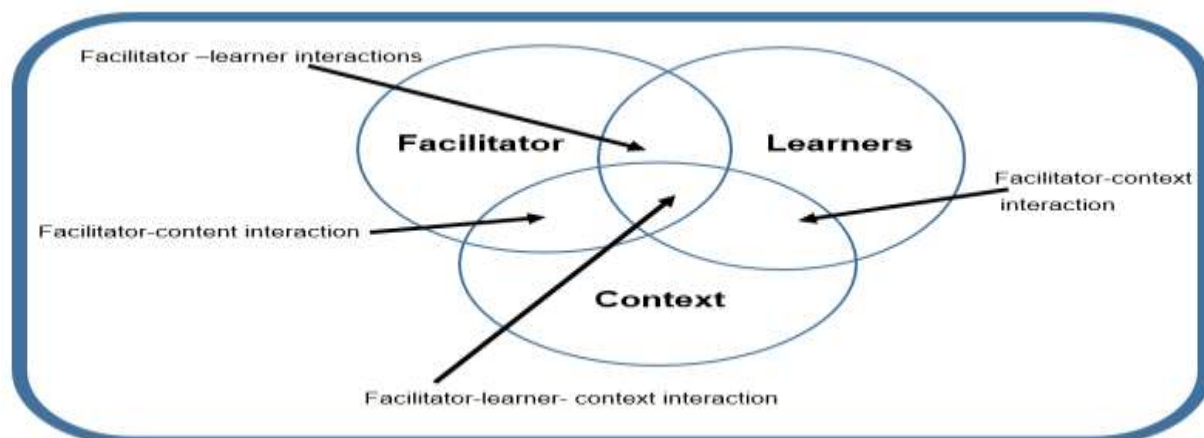


Figure 6.2: Placing quality teaching in a context adapted from Killen (2010)

6.4.6 The content of the training programme

The content of the training programme is based on the study findings which discovered the knowledge gap during the implementation of the nursing process during patient care. The challenges related to incomplete recording, interpersonal and communication skills were identified in the findings. Thus, they were reflected in the content map of the nursing process' training programme figure 6.3 as follows:

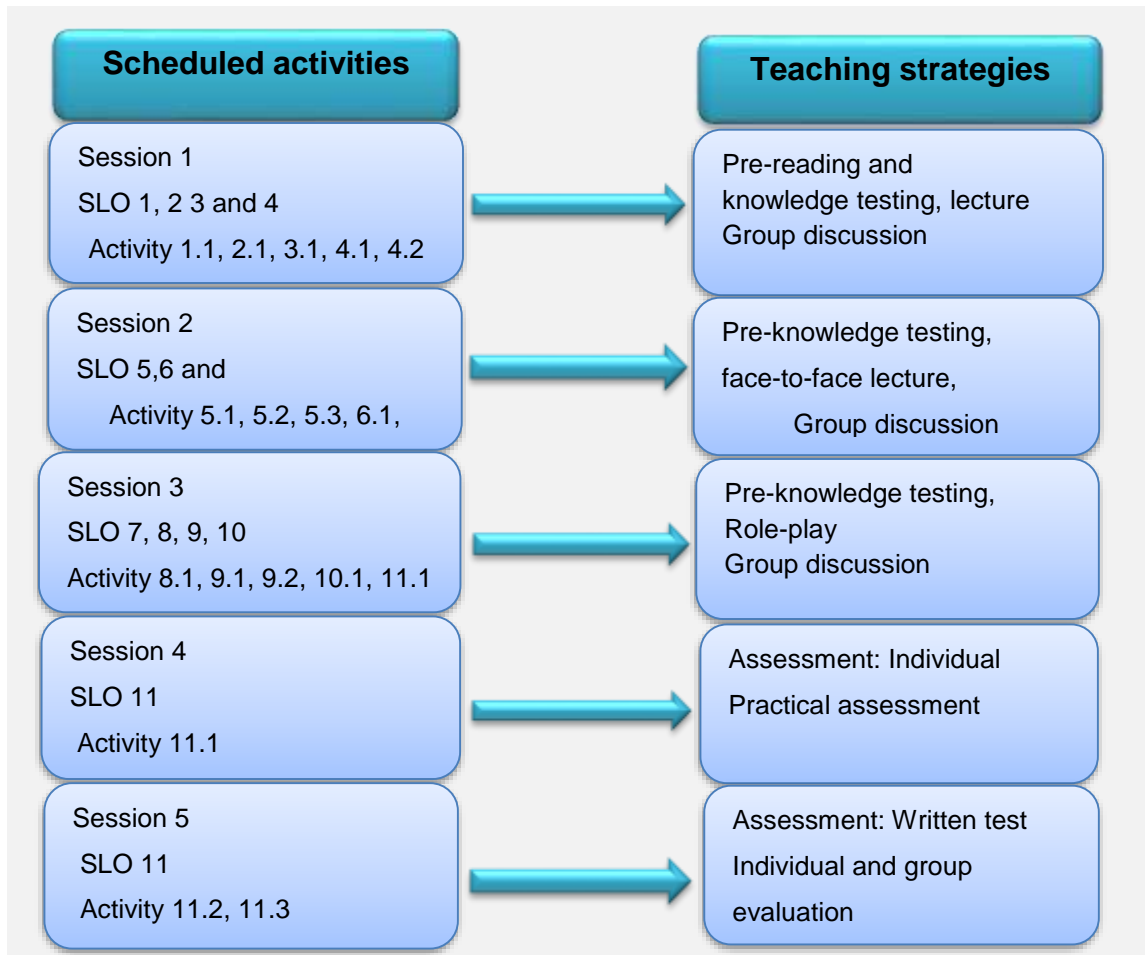


Figure 6.3: Content map of the nursing process' training programme

6.5 THE COMPLETE PLAN OF THE TRAINING PROGRAMME FOR PROFESSIONAL NURSES

The nursing process training programme was developed in line with the South African Qualification Framework (SAQA) Criteria and Guidelines for Short Courses and Skills Programmes. According to SAQA criteria, guidelines for short courses and skills

programme (2004), a credit-bearing short learning programme refers to a variety of short learning programmes for which credits are awarded concerning the course's contribution to an unit standard and/or (part) qualification, are awarded (Council for Higher Education (CHE), 2001).

The context-specific training programme was structured as a short training programme for professional nurses in nursing care units grounded on the SAQA requirements for National Qualification Framework(NQF) Level five accreditation. The workshop will be conducted over five days eight hours per day. The training programme in this study will, therefore, be a credit-bearing short course conducted over five days in the form of a workshop lasting for forty (40) hours equivalent to five credits. The purpose of this short learning programme is to update learners on new developments and insights in their professions, earn credits towards formal programmes, and also intended for personal enrichment.

The planned training programme will be aligned with the research findings and will contribute to the SANC (2015) proposal, in line with the provisions of the Nursing Act, 2005 (Act No. 33 of 2005), in the process of developing Continuing Professional Development (CPD) System when it is approved for implementation. The CPD proposal stipulates that a professional nurse should accumulate 15 CPD points per year that will be eventually linked to the renewal of the Annual Practice Certificate(APC), but currently, the SANC is not yet ready for a full roll-out of CPD. The specific learning outcomes will assist the agent to take into account the latest aspects so that the professional nurses will obtain the recent and up to date information on the nursing process.

6.5.1 The SAQA unit standard format

The SAQA unit standard format for the context-specific training programme was adhered to. This includes the name of the programme/unit standard; NQF level; credits; the purpose of the unit standard; duration of the programme; learning assumed to be in place; specific outcomes and assessment criteria; unit standard or programme assessment; and the critical cross-field outcomes.

6.5.1.1 Name of the programme/unit standard

Nursing process implementation in the nursing care units.

6.5.1.2 The NQF level

This programme will be offered at NQF Level 5.

6.5.1.3 The credits

The programme will be awarded 5 credits.

6.5.1.4 The purpose of the programme/unit standard

This programme is for professional nurses working in the nursing care units who are implementing the nursing process approach, which is aimed at achieving quality patient care. This programme describes the nursing process, the historical background of the nursing process, the advantages of implementing the nursing process in patient care, steps of the nursing process, record-keeping, interpersonal and communication skills.

6.5.1.5 The duration of the programme

The programme would be offered over five days (40 hours).

6.5.1.6 Learning assumed to be in place

The prerequisites were outlined for attending the programme which includes a specified expected educational qualification in Section 1.6.1.3.

6.5.1.7 Specific learning outcomes and assessment criteria of the programme

The specific learning outcomes and assessment criteria were established focusing on the merged findings of Phase one as discussed in Chapter four of this study. The topics are based on what was found during interviews and completed questionnaires with professional nurses in various regional hospitals (Table 6.2).

Table 6.2: Specific learning outcomes, content and assessment criteria of the programme

Learning outcomes	Study units and content	Assessment criteria, student should be able to:
<p>1. Demonstrate understanding and knowledge of the concept “nursing process”</p>	<p>Study unit 1: The description of the nursing process Study unit 1.1 Nursing process” and its advantages Study unit 1.2 Historical background</p>	<p>Explain the concept of the nursing process. Outline the historical background of the nursing process. Explain the advantages of using the nursing process approach to patient care.</p>
<p>2. Explain the ethical and legal framework relevant to the implementation of the nursing process</p>	<p>Study unit 2: Ethical and Legal framework Legislations in nursing practice Study unit 2.1 The Constitution of the Republic of South Africa, Act no 108 of 1996 Study unit 2.2 The nursing Act, Act no. 50 of 2005 as amended Study unit 2.3 SANC Rules and Regulations</p>	<p>Explain section 27 of Chapter 2 of the South African Constitution, Act 108 of 1996. Explain the purpose of the Nursing Act, Act No 33 of 2005. Explain the scope of practice of a professional nurse according to SANC (R2598) concerning the assessment of patient. Explain SANC regulation R387. Explain the following ethical principles relevant to nursing practice: privacy, confidentiality, informed consent, justice, veracity, beneficence, fidelity, and non-maleficence.</p>

	Study unit 2.4 Ethical principles in nursing	
3. Describe the implementation of the steps of the nursing process	<p>Study unit 3: Steps of the nursing process</p> <p>Study unit 3.1 Steps of the nursing process</p> <p>Study unit 3.2 Implementation of steps of the nursing process</p>	<p>List all the steps of the nursing process.</p> <p>Describe the following steps of the nursing process: Assessment, Nursing Diagnosis, Planning, Implementation, and Evaluation.</p> <p>Explain how each step of the nursing process is implemented.</p> <p>Explain the members of the multidisciplinary team involved in the implementation of the nursing process.</p>
4. Describe the importance and principles for record-keeping	<p>Study unit 4: Record-keeping</p> <p>Study unit 4.1 Types of nursing records</p> <p>Study unit 4.2 Importance and principles of record-keeping</p>	<p>List types of records available in the nursing process implementation.</p> <p>Explain the importance of record-keeping and principles of record-keeping.</p>
5. Demonstrate understanding and knowledge of interpersonal and communication skills	<p>Study unit 5: Interpersonal and communication skills</p> <p>Study unit 5.1 Communication and strategies</p> <p>Study unit 5.2 Principles and barriers to communication</p>	<p>Define the concept of communication.</p> <p>Outline the types of communication.</p> <p>Explain the communication techniques used in nursing.</p> <p>Explain the barriers to effective communication.</p> <p>Factors that influence communication.</p>

6.5.1.8 Unit standard or programme assessment

The assessment of this unit standard will be in the context where the training is conducted in the form of written and practical assessment. The recipients will be informed about the assessment methods used in this training which was also be indicated in the programme so that they can prepare themselves. Formative and summative assessment approaches were to assess the level of competency in the form of peer assessment, self- assessment, group presentation feedback, written test, and practical. A practical evaluation tool, written test, marking guide were created and a test was set to assess recipients.

6.5.1.9 The critical cross-field outcomes

The critical cross-field outcomes are important in the training programme as they provide a basis upon which the implementation of the training programme is directed. The recipients were expected to be knowledgeable of the critical cross-field outcomes to achieve the above stated specific learning outcomes. The critical cross-field outcomes are indicated below in Table 6.4.

6.5.2. Learning content of the training programme

The learning content of the training programme will be divided into study units aimed at achieving the specific learning objectives. The programme has five study units which are presented in the course covering the following aspects: the explanation of the concept “nursing process”, historical background of the nursing process, advantages of implementing nursing process during provision of patient care, the ethical and legal framework for implementation of the nursing process, steps of the nursing process, importance, principles of record-keeping, interpersonal and communication skills. Throughout the training session, participants were engaged in activities and record of proving that knowledge and skills have been acquired will be needed Table 6.2.

6.5.3 The designed training programme

The context-specific training programme for professional nurses table 6.3 was designed as follows:

Table 6.3: The design of the context-specific training programme

Course: Short training course on the nursing process implementation in nursing care units	Contact hours: 40 hours Credits: 5 NQF Level: 5 Venue:
Duration of the training sessions	The course will be conducted in five days. Each session will have learning activities with interactive facilitation and some practical exercises which is patient file-based.
Prerequisites Learning assumed to be in place	The prerequisites for this course are: <ul style="list-style-type: none"> • Basic knowledge and skills of the nursing process. • Basic Communication skills at the hospital ward level. • Basic Interpersonal Relationship at the hospital ward level.
Co-requisites Units of learning to contribute during the course	The co-requisites for the course are: <ul style="list-style-type: none"> • A professional nurse registered with the South African Nursing Council. • English as a medium of instruction and communication. • Ability to write and read in English.
Course facilitator	Mutshatshi TE (Nurse Educator, PhD student) during the study and trained the trainers afterwards.
Purpose of the course	The overall purpose of the course is to equip and improve professional nurses' knowledge, skills, and update them with the latest activities and development in the implementation of the nursing process.
Critical cross-field outcomes Course participants will be able to:	

- Identify and use problem-solving skills to solve problems related to the implementation of the nursing process.
- Work effectively with others as a member of a team, group, organisation, community to achieve learning objectives.
- Organising, managing oneself responsibly and effectively.
- Collect, analyse and critically evaluate information.
- Reflect and explore learning strategies which are effective during the training.
- Use science, technology effectively and responsibly towards the achievement of the set goals.
- Communicate effectively using visual, mathematical or language skills both oral and written persuasion.
- Recognise that the problem-solving contexts do not exist in isolation and work as a team member of the multidisciplinary healthcare team.

Course outline:

On completion of this training, the professional nurses as learners should be able to have achieved the following Specific Learning Outcome (SLO1 to 11):

SLO1. Explain the concept “nursing process”.

SLO2. Explain the historical background of the nursing process.

SLO3. Explain the legal framework of the nursing practice from a South African context:

3.1 The Constitution of the Republic of South Africa.

3.2 The Nursing Act.

3.3 The South African Nursing Council rules and regulations, R2598, R387.

SLO4. Discuss the basic ethical principles relevant to nursing practice.

SLO5. Outline and describe the different steps of the nursing process.

SLO6. Explain the importance and general principles of record-keeping in nursing.

SLO7. Define the concept of “communication”.

SLO8. Outline the types of communication.

SLO9. Explain the barriers to effective communication.

SLO10. Factors that influence communication.

SLO11 Demonstrate an understanding of the implementation of the nursing process

Specific Learning Outcome 1. Explain the concept “nursing process”.

2.1 Learning outcomes

At the end of the session participants should be able to:

- Explain the concept the “nursing process”.



Activity 1.1 Individual study

Find different sources in literature which describe the nursing process.

- Use personal experience to attend to the following:
 - In a piece of paper explain what you understand by the concept “nursing process”.
 - Explain the advantages of implementing the nursing process during the provision of patient care.
 - Discuss individual answers with the colleague sitting next to you.
 - Each participant will report the partner’s answers.
 - Assessment of individual answers.
 - Consolidate all answers and reflect.
 - The facilitator summarises the concepts and adds input.

- Lewis, SL, Bucher, L, Heitkemper, MM & Harding, MM.2017. Medical-Surgical Nursing: Assessment and Management of Clinical problems. USA. ELSEVIER
- Smeltzer, SC, Bare, BG. Hinkle, JL Kerry HC, Mary Jo Boyer, MJ. 2012. Brunner & Suddarth’s Textbook of Medical-Surgical Nursing 10th edition. Lippincott Williams & Wilkins.
- Zewdu S, & Abera M. 2015. Determinants towards Implementation of Nursing Process. *American Journal of Nursing Science*. 4(3):45-49.

Specific Learning Outcome 2. Discuss the historical background of the nursing process.

1.1 Learning outcomes

At the end of the session participants should be able to:

- Explain the historical background of the nursing process.

Activity 2.1 Face to face lecture



Explanation of the historical background of the nursing process

- Facilitator consolidate SLO 1 and SLO 2.
- Make a summary and give input.

Alligood, MR. & Marriner-Tomey, A., 2010. *Nursing theories and their work*. 7th edition. United States of America: Mosby.

Kozier, B., Erb, G., Berman, A. & Snyder, SJ. 2011. *Fundamentals of nursing concepts process and practice*. 9th edition. United States of America: Berman & Snyder. Prentice hall.

Specific Learning Outcome 3. Explain the legal framework of nursing practice from the South African context.

3.1 Learning outcomes

At the end of the session participants should be able to:

- Explain the legal framework of nursing practice from a South African context using the following sources:

Activity 3.1 Pre-reading and pre-knowledge assessment



- The Constitution of the Republic of South Africa, Act No. 108 of 1996 (chapter 2 section 27).
- The Nursing Act, Act No. 33 of 2005.
- SANC Rules and Regulations R2598 (Scope of practice of a registered nurse).
- SANC Rules and Regulations R387 (Acts and omissions).
- After reading Chapter 2 Section 27 of the Constitution of South Africa Act (No108 of 1996), explain the right to health care.

- Read R2598 and R387, you should be able to identify and describe the scope of practices of a registered nurse and acts and omissions during nursing practice upon which SANC can take disciplinary measures.
- Divide into two groups and choose a group presenter for reporting time.
- Discuss the legal framework for nursing from the South African context.
- Focus on the Bill of Rights, the purpose of the nursing act, scope of practice and acts and omission.



- The Constitution of the Republic of South Africa, Act 108 of 1996 chapter 2 section 27.
- The Nursing Act no 33 of 2005 as amended.
- The South African Nursing Council Rules and Regulations, R2598.
- The South African Nursing Council Rules and Regulations R387.

Specific Learning Outcome 4. Discuss the basic ethical principles in nursing practice.

4.1 Learning outcomes

At the end of the session participants should be able to:

- Explain the following basic ethical principles relevant to nursing practice and add more principles thereof.

Activity 4.1 Group activity



Divide yourselves into three groups

- Identify concepts used in ethics, write them down and explain each concept.
- Indicate whether any of the identified concepts were used since you have been appointed as professional nurses or not.

- If yes, explain how it has been used. Also, explain how one could apply the ethical concepts during patient care in the wards.
- One group member to present your discussion.
- The facilitator summarises and gives inputs.

The following are some concepts related to ethics but not limited to the following:

4.1.1 Privacy

4.1.2 Informed consent

4.1.3 Confidentiality

4.1.4 Beneficence

4.1.5 Non-maleficence

4.1.6 Justice

4.1.7 Veracity

4.1.8 Non-maleficent

Activity 4.2 Group activity



- Divide yourself into two groups.
- Share the basic ethical issues relevant to nursing practice and how they are implemented during patient care.
- One group member to present your discussion.
- The facilitator summarises and gives inputs.

- Haddad LM, Geiger RA. Nursing Ethical Considerations. [Updated 2020 Feb 18]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK526054/>
- Mellish, J., Oosthuizen, A. and Paton, F. (2010) *An Introduction to the Ethos of Nursing*. 3rd ed. Sandton, Johannesburg, South Africa: Heinemann Publisher (Pty) Ltd.
- Park, M., Jeon, SH., Hong, HJ., & Cho, SH. (2014). A comparison of ethical issues in nursing practice across nursing units. *Nursing Ethics*, 21(5), 594–607. <https://doi.org/10.1177/0969733013513212>

Specific Learning Outcome 5. Outline and describe the steps of the nursing process

5.1 Learning outcomes

At the end of the session participants should be able to:

- Outline and describe the different steps of the nursing process

5.1.1 Assessment

5.1.2 Formulation of nursing diagnosis using the NANDA approach

5.1.3 Planning

5.1.4 Implementation

5.1.5 Evaluation

Activity 5.1 Pre-knowledge assessment



- In a piece of paper, use your experience to individually outline the steps of the nursing process.
- Indicate the three main components to be considered when you formulate nursing diagnosis.
- Give two examples of nursing diagnosis using NANDA approach.

Activity 5.2 Case study



Assemble in two groups and discuss the following:

Maria, 30 year old female patient is admitted in the ward with shortness of breath. Her mother is a known Asthmatic patient on treatment. Vital signs are as follows: temperature 36.5 degree Celsius, pulse 140b/minute, respiration 36 breaths/minute, Oxygen saturation 70%. On examination, she has wheezy respiration. The doctor diagnosed her as having Acute Asthma.

Using the provided assessment and nursing care plan form:

- Record the vital data of this patient.
- List the identified problems.
- Identify the system that has been affected in Maria's case.
- Formulate the nursing diagnosis of this patient using NANDA approach.
- Formulate the potential nursing diagnosis using NANDA approach.
- Draw the nursing care plan for this patient.

Activity 5.3 Group discussion



Emma is 1 year old admitted in the unit with a diagnosis of full-thickness burns. She has blisters all over her face and chest. Her vital signs now are Pulse 65, Respiration 20, Temp 36.7°C. She is crying severely and refusing the breast. No Road to Health Card (RTHC) is available.

Complete all the activities with your group members and then one group member to present to the class:

- Explain the subjective data you will collect from Emma's Mother?
- Which objective assessment will you conduct on Emma?
- List all the identified problems for this patient.
- Identify the systems affected in Emma's case.
- Formulate the nursing diagnosis for Emma using the NANDA approach.
- Plan the nursing intervention for this patient.
- Which health education advice can you give Emma's mother?
- Identify any other members of the multidisciplinary team who can participate in Emma's care?

- Abdelkader, FA & Othman, WNE. 2017. *Factors affecting implementation of the nursing process: nurses' perspective*. Journal of nursing and health science, 6(3):76-82.
- Berman, AT., Snyder S. & Frandsen, G. 2015. *Kozier and Erb Fundamentals of Nursing: Concepts, Process and Practice*. 10th edition. United State of America. Pearson prentice Hall.
- North American Diagnosis Association (NANDA). 2017. *History of nursing diagnosis*. <http://www.nanda.org/nandainternational-history.html> (retrieved: 23.8.2017)

- Sparks, S., & Taylor, C. 2014. *Sparks and Taylor's nursing diagnosis reference manual*, 9th edition. Philadelphia, PA: Wolters Kluwer Health/Lippincott Williams and Wilkins.

Specific Learning Outcome 6. Explain the importance and principles of record-keeping in nursing practice.

6.1 Learning outcomes

At the end of the session participants should be able to:

- Explain the importance of record-keeping in nursing practice.
- Explain the principles of record-keeping.

Activity 6.1 Role-play



An enrolled nurse monitored vital signs for a critically ill patient and did not record in the patient's file. The doctor is reviewing the patient and the temperature is not recorded. The nurse insisted that the temperature was monitored but she forgot to record it.

Share amongst the group members the roles of a doctor, an enrolled nurse, and a professional nurse in this scenario. De-role after the role play.

As a professional nurse in charge of the unit:

- List types of records in nursing practice?
- Explain to the nurse the importance of record-keeping in nursing practice?
- Principles of record keeping.

- Alkouri, OA. 2016. Importance and implementation of nursing documentation: Review Study. *European Scientific Journal*. 12(3). 1857-7881.
- Blair, W & Smith, B. 2012. Nursing documentation: Frameworks and barriers, *Contemporary Nurse*, 41:2, 160-168, DOI: 10.5172/conu.2012.41.2.160 To link to this article: <https://doi.org/10.5172/conu.2012.41.2.160>
- Mutshatshi, TE., Mothiba, TM., Mamogobo, PM. & Mbombi, MO., 2018, 'Record-keeping: Challenges experienced by nurses in selected public hospitals', *Curationis* 41(1), a1931. <https://doi.org/10.4102/curationis.v41i1.1931>.
- The South African Nursing Council Rules and Regulations R387.

Specific Learning Outcome 7. Define the concept of “communication”.

7.1 Learning outcomes

At the end of the session participants should be able to:

7.1.1 Define the concept of “communication”.

The following concepts related to communication should be explained:

- Sender
- Message
- Recipient

Activity 7.1 Role-play



Select two volunteers to demonstrate the communication process in a role play.

- Ask the class to identify concepts related to communication.
- Evaluate whether this communication was effective or not and give a rationale

Specific Learning Outcome 8. Outline the types of communication and communication techniques

8.1 Learning outcomes

At the end of the session participants should be able to:

- Outline the types of communication.
- Explain the communication techniques used in nursing practice.

Activity 8.1 Group discussion



- Divide the class into two groups.
- Discuss the types of communications.
- Let one member in each group present what was discussed in the group.
- Facilitator to summarise and add input.

Activity 8.2 Face to face lecture



Teach a group of learners the communication techniques used in nursing.

Communication techniques include:

- Written communication.
- Verbal communication.
- Non-verbal communication.

Specific Learning Outcome 9. Explain the barriers to effective communication.

9.1 Learning outcomes

At the end of the session participants should be able to:

Explain the barriers to effective communication.

Activity 9.1 Group activity



Explain the barriers to effective communication.

- Divide participants into two groups and discuss the barriers to effective communication.
- The participants choose a scribe and a presenter.
- The barriers to effective communication are presented to the class

Specific Learning Outcome 10. Factors that influence communication.

10.1 Learning outcomes

At the end of the session participants should be able to:

- Explain the factors that influence communication.

Activity 10.1 Individual activity



Find different sources of literature which describe these topics:
Each participant is expected to write all factors that influence communication.

- Assessment of individual answers.
- Write down the individual answers.
- Consolidate on answers and reflect.

Reading materials for SLO 9,10 and 11.

- Basavanthappa, BT. (2009). *Nursing Administration*. New Delhi: Jaypee Brothers Medical Publishers (PTY) LTD.
- Zamanzadeh, V., Rassouli, M., Abbaszadeh, A., Nikanfar, A., Alavi-Majd, H., & Ghahramanian, A. 2014. Factors Influencing Communication Between the Patients with Cancer and their Nurses in Oncology Wards. *Indian journal of palliative care*, 20(1), 12–20. <https://doi.org/10.4103/0973-1075.125549>

Specific Learning Outcome 11. Demonstrate an understanding of the nursing process Implementation

11.1 Learning outcomes

At the end of the session participants should be able to:

- Demonstrate auditing of a nursing process in a patient file.
- Demonstrate knowledge of implementation of the nursing process in a written test.



Activity 11.1 Individual skill/practical assessment

Each learner to be assessed on the skill of auditing the patient's file on the implementation of the nursing process.

A practical assessment tool and marking guide: [Practical assessment tool and marking guide.docx](#)



Activity 11.2 Individual assessment test

Each learner to complete an individual written test on implementation of the nursing process

- A written assessment test and marking guide: [Written assessment test and marking guide.docx](#)

Activity 11.3 Evaluation of the training programme



Each learner is allowed an opportunity to evaluate the training programme

- Complete an individual evaluation tool to evaluate the training programme: [Evaluation tool for the Training Programme.docx](#)

6.4.3.1. The Facilitator Manual

The facilitator manual guide trainer facilitator and also the trainer of the trainers during training sessions after the study. [Facilitator Manual.docx](#)

6.4.3.2 The programme of the Training Programme workshop

The following is the five-day programme of the Training Programme workshop:

[The programme of the Training Programme workshop.docx](#)

6.6 THE GUIDELINES FOR IMPLEMENTATION OF THE TRAINING PROGRAMME

The development of the training programme includes the description of guidelines for the implementation of the programme. According to Rosenfeld and Shiffman (2009), guidelines are important because they serve as a guide. A standard to best practices, for directing the implementation of the programme activities. Thus, a common point of reference for hospitals' practices. The following guidelines were developed to direct implementation of the training programme:

6.6.1 Guidelines for the agent

The following guidelines are meant for the agent of the training programme:

- The agent should make a preparatory arrangement for the implementation of the training programme with the hospital managers to provide times and venues for the agent to conduct the programme.
- The agent who could be the nursing process coordinator should be aware of his/her knowledge and skills about the nursing process.
- The agent should create a favourable environment for professional nurses to learn how to improve the implementation of the nursing process during patient care.
- The agent has to be practical and possesses comprehensive skills and information important in supporting professional nurses and help them towards the implementation of the nursing process in patient care.
- The agent's roles in the empowerment of professional nurses in the implementation of the nursing process should be clear so that each one is conscious of the obligations of self and the other to avoid conflicting ideas.
- It is the responsibility of the agent to seek more information about the nursing process so that during the implementation part the agent demonstration the highest level of knowledge and understanding of the nursing process.
- Provide support to the recipients during the accomplishment of all programme activities.

6.6.2 Guidelines for the recipient

The following are the guidelines for the recipient:

- The recipients, in this case, are professional nurses who need to acknowledge the knowledge gap they have about the implementation of the nursing process during patient care in the wards.
- Active participation in each activity has to be encouraged so that the recipients can acquire the skills during interaction with the agent.
- The recipient should achieve all expected learning outcomes for the programme.
- Professional nurses have to take responsibility towards their professional growth, development and be willing to learn during the empowerment process.
- The recipient should be able to negotiate with colleagues about group discussions for completion of given group activities.

- Keep a record of each activity in each study unit as it will assist them during the completion of the programme evaluation tool.

6.6.3 Guidelines for the context

The following guidelines were formulated based on the data analysis as discussed in Chapter four of the study.

- The context is the regional hospitals in the Limpopo Province where professional nurses are implementing the nursing process during patient care.
- All relevant Acts and Regulations should be practiced in all health care services in the hospital setting as prescribed by the legislative authority.
- The hospital should cooperatively investigate for the latest information on the nursing process to keep abreast of the latest developments within the nursing profession.
- The clear guidelines should be set and be forwarded to nurse experts during workshops to gain more up-to-date knowledge on the implementation of the nursing process to strengthen the programme and to ensure sustainability.
- Encouragement of the collaboration with the nursing audit team and nursing process experts at the hospital level as they could be valuable resource support to nurses implementing the nursing process.
- The hospitals should also take part in the district, provincial and national activities related to the nursing process to ensure hospitals receive up-to-date information to implement the nursing process effectively.

6.6.4 Guidelines regarding the dynamics of the programme

The dynamics of the programme include the agent's and recipients' responsibility, accountability, willingness, effective communication, participation, and commitment. The guidelines to operationalise these dynamics are described as follows:

Responsibility and accountability.

- Professional nurses have to be willing to be responsible for their learning and empowerment by the agent as an expert in the field.
- Professional nurses should be accountable for their actions and omissions during the empowerment process.

Willingness and commitment.

- The agent should be keen to commit own time and energy to empower and capacitate the recipients through a variety of activities.
- Professional nurses should be willing and committed to being directed and empowered by the agent.
- The recipients, professional nurses should also be prepared to work towards self-growth and development through the assistance of experts and ready to seek clarity when the need arises.
- The agent and the recipients should all be willing and committed to the process.

Active participation

- The agent and the recipients should be eager to actively participate in the empowerment activities to achieve the desired results.
- Participation on the part of the agent demands an understanding of their professional and moral responsibility towards the professional development of professional nurses implementing the nursing process during patient care.
- Both the agent and the recipients should participate in discussions and feedback on aspects related to the nursing process.

6.6.5 Guidelines regarding the procedure

The training programme aims to improve the implementation of the nursing process during patient care through situational analysis, design, development implementation, and evaluation. These activities are discussed as follows:

Situational analysis;

- The first step of the programme is the full interview with professional nurses on their practices and training needs when implementing the nursing process.

Design, plan, and development;

- The agent prepares for the programme based on the knowledge gaps and training needs as identified in the situational analysis leading to the development of a training programme to improve implementation of the nursing process.
- The agent will outline and transfer information regarding the nursing process implementation and set goals for its implementation.

- The planning aims to influence personal and professional development for professional nurses on how they are going to deal with the dynamics.

Implementation;

- At this level, active participation is noted in the workshop is conducted for professional nurses on the implementation of the nursing process.
- Sharing of information is initiated in a favourable environment to develop both reflective, cognitive, and psychomotor skills.

Evaluation;

- The professional nurses to accept professional values through feedback to improve modification of behaviour for positive results and feedback may bring improvement performance of a professional nurse.

6.6.6 Guidelines in terms of the terminus or result of the programme

There is an expectation that the results of the agent, recipient, and context will be:

- A competent professional nurse in implementing the nursing process.
- Acquiring lifelong teaching, mentoring skills on the part of the agent it will enable them to be responsible and competent health professionals.
- The context could improve quality patient care since professional nurses will be able to effectively implement the nursing process during patient care.

6.7 VALIDATION OF THE TRAINING PROGRAMME PRIOR IMPLEMENTATION.

The purpose of validation is to verify the developed training programme will improve the professional nurses' implementation of the nursing process during patient care. Theory and practice shape nursing practice and should be practical and enable the articulation and should contribute importantly towards the improvement of patients' care (Dickoff et al.,1968). Furthermore, the findings of the study has identified various concepts that the developed training programme should cover in its content, teaching and learning strategies that can be employed to implement the developed programme as outlined in Chapter 5 of the study. The developed training programme need to be verified through engagements with experts in the field (Torres & Stanton, 1968).

The appropriateness of the developed training programme was validated through consultations with nurse managers, nurse educators, quality assurance managers and professional nurses intended to participate in the implementation of the training programme. The main purpose was to come into consensus on the content, to obtain feedback of the training and to check if the content and concepts used are consistent with professional nurses' practices when implementing the nursing process and also in line with SANC rules and regulations. The participants were also requested to verify the content to ensure that what is presented and teaching methods are appropriate to the level of professional nurses implementing the nursing process

Questions asked in a one to one encounter included “ *What is that the training programme should include or remove to ensure it is more appropriate* “ and the responses from participants confirms that the developed programme is appropriate to improve implementation of the nursing process during patient care. Study participants agreed with the concepts as prepared and presented by the researcher. The training content was prepared in alignment with SANC training programmes. Some nurse experts added that ethical and legal framework is important especially the revision of the scope of practice need to be included.

6.8 CONCLUSION

Chapter six discussed the development of a context-specific training programme for the professional nurse at the regional hospitals. The development of the training programme was grounded on the study results from the analysis of both qualitative and quantitative merged findings. The study showed that for professional nurses to effectively implement the nursing process in the wards, they needed a training programme that would assist them to improve the implementation of the nursing process and this was further validated. The development of a training programme consisted of specific learning outcomes that formed the study units to empower professional nurses with knowledge and skills to improve the implementation of the nursing process. The guidelines for the implementation of the training programme were described based on Dickoff's six essential elements, the agent, recipient, context, procedure, dynamics, and terminus.

CHAPTER 7

IMPLEMENTATION OF THE TRAINING PROGRAMME, SUMMARY, LIMITATIONS, RECOMMENDATIONS, AND CONCLUSIONS

7.1 INTRODUCTION

Chapter six described the development of the nursing process training programme for professional nurses and the guidelines for the implementation in public hospitals in the Limpopo Province, South Africa. Chapter seven is the final chapter of this study, which focuses on the implementation of the nursing process training programme for professional nurses. The summary of the whole study, the recommendations, limitations, and conclusions of the study. The last objective of the study was to:

- Implement the training programme for professional nurses implementing the nursing process in public hospitals in the Limpopo Province, South Africa.

7.2 IMPLEMENTATION OF THE TRAINING PROGRAMME FOR PROFESSIONAL NURSES

Implementation is a process of operationalisation of the developed programme and evaluating if the programme activities produced the results that were intended to by the recipients, intending to make adjustments in the programme if necessary. The implementation of the programme was also intended to confirm if the results of the study were still the same as what the participants explained during the situational analysis phase in Chapter three of the study. The participants again have to confirm as to whether the training programme addresses their training and learning needed in the implementation of the nursing process during the provision of quality patient care. The implementation phase was, however, conducted with professional nurses in the Vhembe district only due to the regulations associated with COVID-19 pandemic lockdown levels declared in the country.

7.2.1 The process

The implementation was conducted on separate occasions with few participants to ensure safety measures are adhered to as outlined in the WHO guidelines for the prevention of infections, and the South African government in collaboration with the National Department of Health. During the implementation phase, all safety measures were adhered to which includes maintaining social distance where the sitting arrangements were about 1.5 to 2 meters apart, the compulsory wearing of facemasks at all times in the session, frequent handwashing and use of sanitisers. Thorough cleaning of the environment and surfaces and minimising contact at all times throughout the sessions. The implementation was conducted in three separate sessions, where the first session had four participants, the second one had three participants, and the third session also had three participants. The sessions of implementing the training programme were conducted in fewer days not as planned to minimise contact and time spent with participants as much as possible.

Pre-arrangements were made with professional nurses to participate in the training programme, where on the first day the whole programme was introduced, training materials were given and pre-training assessments (Appendix J and Appendix K) were done to all participants. The importance of giving the pre-training assessment was to assess current the training needs, knowledge, and skills gaps of the professional nurses who are implementing the nursing process during patient care. Furthermore, the researcher wanted to confirm whether the scores obtained would yield similar findings as the ones obtained during the situational analysis phase of the study.

The participants were then on the second day introduced to the activities in the training programme by the researcher who was the programme facilitator. Post-training assessments (Appendix J and Appendix K) were conducted again to assess the knowledge and skills that the professional nurses acquired during training compared with the pre-training assessment scores. The post-training assessment scores were analysed to check if there were differences in the pre and post-training scores of each participant

and the differences were noted between the scores. The importance of the post-training assessment was to confirm the difference in the scores before and after the training. The findings indicated that the training programme has improved the participants' knowledge and skills. At the end of all sessions, all participants were given evaluation forms to comment and make input on the training programme aimed at improving the training programme (Appendix M). A total of ten professional nurses was accessed at different intervals to implement the nursing process training programme.

The ADDIE model was used to guide the implementation phase of the training programme where the last two phases of the model that is the implementation, and the evaluation were adhered to. The participants were given pre-test assessments, followed by activities in the programme, post-test assessments, and individual evaluation, using an evaluation tool, to evaluate the whole programme. The evaluation of the training programme was the last phase of the ADDIE model and all professional nurses were included in both the assessments, training, and the evaluation of the training programme.

A context-specific training programme for professional nurses implementing the nursing process started with the situational analysis in Phase one, then the theoretical framework was developed in Phase two, followed by the development of the training programme with guidelines in Phase three and then the implementation of the training programme in Phase four which was conducted during this phase. The following study units were included in the training programme i.e. the description of the nursing process, legislative, and ethical aspects in the implementation of the nursing process, the implementation of the steps of the nursing process, principles, and importance of record-keeping, the interpersonal and communication skills during the implementation of the nursing process.

7.2.2 Training resources

The material resources for training were developed in advance. Thus, the training manuals including the facilitator manual, guidelines, and all related training materials were developed during the development phase of the study. The training needs that were identified during the analysis phase were included in the list of topics to be covered in the

training programme. The training material was based on articles, books on the nursing process and it was ensured that recent materials were used to keep nurses abreast of the latest information on the nursing process. Writing materials and a laptop were arranged for the training sessions and all training materials were printed.

The development of the training materials was also verified for quality purposes by the supervisors before the training commences and inputs were considered. The simulation skill was prepared before training using a replica of patient records used for the nursing process in hospitals. Thus, “the nursing process booklet”, to be able to assess them for the pre and post-training practical skill for the success to be achieved. The training materials were handed over to the participants on the first day including the pre-training assessment materials overall explanation of aspects of the training programme.

7.2.3 The provision of training

The facilitator who is a knowledgeable professional nurse, nurse educator, assessor and moderator arranged for training dates. The arrangements were made with the participants who were off duty and the whole process was thoroughly explicated to them given the COVID-19 pandemic and their consent to participate in the study. The originally planned sessions were prepared for five days but because of the current COVID-19 pandemic each session was consolidated in two days and there were limited participants in each of the three sessions that were conducted. The first session had four participants and the remaining two had three participants each and an overall total of 10 participants were trained. The training was conducted in a pre-arranged venue which could accommodate the small number of participants to avoid overcrowding but strictly adhering to all precautionary measures to prevent infections. The introduction of the training was briefed on the first day and pre-training assessments were done followed by some activities and training was concluded on the second day with post-training assessments.

7.3.4 Evaluation of the training programme

The participants were continuously evaluated throughout the training to ensure that the objectives were accomplished. The immediate evaluation was guided by Kirkpatrick's

evaluation models which are comprised of four-level namely: level one which is the reaction level, level two which encapsulates the learning process, level three also known as the behaviour as well as level four; the results level (Kurt, 2016). The study focused on the first two levels of the evaluation, reaction, and learning levels.

- *Level one: Reaction level*

The evaluation of reaction can be done immediately when the training ends. It is simple to obtain reaction feedback. This can be done post-training through surveys or questionnaires. The reaction evaluation reveals how the delegates felt, their reactions to the training or learning experience such as whether the trainees like or enjoy the training? did they reflect the training as relevant? This evaluation of the whole training was to measure the extent that the exercise achieved the learning objectives. The feedback after the programme was attained by encouraging written comments in an open-ended questionnaire to generate immediate responses. An evaluation tool was developed to guide the participants about what was interesting in the training programme, what they disliked, what can be improved and any other comment that they think the facilitator needs to consider.

The knowledge and skills of professional nurses were assessed using the written test as well as the evaluation tool for a skill that was done pre-training and post-training. The participants evaluated the training through pre-training and post-training assessments. An immediate evaluation of the whole training was conducted using an evaluation tool to measure the extent that the training achieved the learning objectives. An open-ended question evaluation tool was prepared to guide the participants about what was interesting in the training programme, what they disliked, what can be improved. Thus, including any other comment that they think the facilitator needs to consider. Figure 7.1 indicates the findings of the reaction evaluation.

Table 7.1: Reaction evaluation of the training programme

1. Positive aspects of the training programme:
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- Legislations on the scope of practice outlined,
- Explanation of formulation of nursing diagnosis,
- Steps of the nursing process outlined,
- Importance of recording outlined, and
- Well explanation and knowledgeable facilitator.

2. Challenging aspects of the training programme:

- The assessments before and after training were not interesting,
- The limited time to complete all the work, and
- Venue to have Wi-fi for downloading materials.

3. Suggestions for improving the training programme and its implementation:

- Clarity of the system and NANDA approach in the formulation of nursing diagnosis,
- Multidisciplinary team involvement in the nursing process, and
- Recommendation for the adoption of the training programme by the Provincial Department of Health, so that all professional nurses are trained.

Almost all the professional nurses had positive views about the training programme but however a more comprehensive evaluation of the implementation of the training programme is essential especially if the training programme is adopted in for implementation as the current implementation was limited due to current pandemic regulations . They also alluded that the training met their expectations about the nursing process. The participants were satisfied by the manner in which the facilitation was conducted. Additionally, they commended the way the legislative framework on the nursing process was elucidated particularly the SANC Rules and regulations R2598. The scope of practice of registered nurses was a good revision for them. The explanation of the nursing process specifically the formulation of the nursing diagnosis was perceived as more interesting as the components of a nursing diagnosis were meticulously outlined.

The participants were also satisfied with the outlined principles, as well as the importance of record-keeping which is important in the nursing practice when implementing the nursing process. The professional nurses were satisfied with the overall training programme i.e. the objectives, topics included, activities, the facilitator, and facilitation methods. However, the professional nurses were not impressed by the venue. They indicated the venue would have been perfect if there was Wi-Fi, for them be able to download other information that would promote blended learning. Furthermore, they highlighted that time was insufficient to cover all aspects and wished that more time was allocated to learn more.

The participants as adult learners had negative attitude about the pre-training and post-training assessments lamenting that they only needed the information which was relevant to their work but not the assessments. The professional nurses also suggested other aspects that they wish the facilitator should consider such as a thorough emphasis on the difference between the system and the NANDA approach. Moreover, they demanded the involvement of the multidisciplinary team, the inclusion of the users of visual aids and are also of the opinion that a recommendation is made for the provincial department of health to adopt the training programme to equip professional nurses in public hospitals. These responses were generated through the open-ended questions that the participants completed during the immediate evaluation of the training programme.

- *Level two: The learning level*

The learning evaluation measures the extent to which training has to increase the knowledge or intellectual capability and skills from both before and after the learning experience. This includes aspects such as whether the training provided what the participants had envisaged to learn, what is the extent of improvement or change in the participant's knowledge and skills after the training, did the training target what was to be achieved? In this study, this was achieved through typically pre-training and post-training assessments. Table 7.2 demonstrates the performance score of professional nurses' pre- and post-training assessments.

Table 7.2: Pre- and post-training knowledge and skill assessment scores

PARTICIPANTS	WRITTEN ASSESSMENT		SKILL ASSESSMENT	
	Pre-training scores n(%)	Post-training score n (%)	Pre-training scores n(%)	Post-training scores n(%)
Participant 1	24 (60%)	29 (73%)	16 (53%)	20 (67%)
Participant 2	29 (73%)	34 (85%)	15 (50%)	23 (77%)
Participant 3	27 (68%)	34 (85%)	19 (63%)	22 (73%)
Participant 4	23 (58%)	32 (80%)	16 (53%)	23 (77%)
Participant 5	26 (65%)	33 (83%)	19 (63%)	24 (80%)
Participant 6	25.5 (64%)	28.5 (71%)	15 (50%)	22 (73%)
Participant 7	19 (48%)	27.5 (69%)	18 (60%)	24 (80%)
Participant 8	18 (45%)	28 (70%)	18 (60%)	21 (70%)
Participant 9	19 (48%)	25 (63%)	20 (67%)	23 (77%)
Participant 10	25 (63%)	35 (86%)	21 (70%)	26 (87%)
AVERAGE	58.2%	74.6%	58.9%	76.1%

A total of 10 professional nurses who attended the training programme were participated in the assessment sessions. The findings revealed that in the pre-test written assessment participants who obtained 40%- 49% were only 3 (30%), 50%-59% was only 1 (10%) and 60%-69% were 6 (60%), whereas in post-training 60%-69% were 2 (20%), 70%-79% were 5 (50%). This, therefore, means that there was a knowledge gap amongst

professional nurses in the implementation of the nursing process. During written post-training, two (20%) obtained between 60%-69%, five (50%) between 70%-79% and three (30%) scored between 80%-89%. These findings suggest that after the training the knowledge of participants has improved. In skill assessment during the pre-training four (40%) scored between 50%-59%, between 60%-67%, and only 1 (10%) scored 70%. During the post-test skill assessment, scores were only 1(10%) obtained between 60%-69%, six (60%) scored between 70%-79%, and three (30%) scored between 80%-89%.

The completed knowledge and skill assessment results before and after the training were compared. The post-training scores were higher than the pre-training assessment ones. The pre-training scores confirmed that there were knowledge and skill gaps while the post-training scores show improved knowledge and skills in the implementation of the nursing process. Thus, the number of scores in the post-training assessments posits that the training of professional nurses on the nursing process implementation was essential to improve their knowledge and skills. This would therefore aid to improve the implementation of the nursing process during patient care in public hospitals in Limpopo Province.

7.3.5 Discussion of findings

This study aimed to investigate the development and implementation of a training programme to improve the implementation of the nursing process by professional nurses in public hospitals. This study was guided by the ADDIE model, implement, and evaluate. The implementation was done successfully and the immediate evaluation of the training followed Kirkpatrick's four levels of the evaluation model, however, only the first two levels were utilised. The overall training programme implementation was successful since the training objective was achieved. The findings of the evaluation show that the training yielded positive reactions and correspond with the findings of a study conducted by Curado and Teixeira (2014) where the training programme had a positive impact at the evaluation level.

The professional nurses were satisfied with the content of the training programme, the topics covered, activities, the facilitator, facilitation methods, and the training programme has achieved its intended objectives. The reaction level evaluation findings from the participants were responding positively which therefore confirms that the implemented training programme was of high quality. This finding agrees with that of a study conducted by Yahia and Al-Khaldi *et al*, (2016) revealed that trainees expressed a good level of satisfaction. This reflects that most of their learning needs were met and were successfully achieved.

The findings of the study about learning revealed that high scores were obtained by professional nurses in the post-training assessment. Compared to the pre-training assessment, which is an indication that the training improved their knowledge and skills in the implementation of the nursing process. In support of these findings, a study conducted by Wangoro and Rakuom, (2015) revealed that there was a positive change of attitude and improvement in the quality of nursing care documentation in hospitals that implement the nursing process after training.

The findings also suggest that the training programme was interesting. Although, challenges were encountered, which include stress experienced by professional nurses before, during, and after the training assessments, insufficient time, and lack of internet access. This is congruent with the findings of a study conducted by Pulido-Martos, Augusto-Landa, and Lopez-Zafra (2012) which indicated that academic stressors are common in testing, evaluation, and fear of failure in training. The professional nurses also suggested that the facilitator recommends to the health department that the training programme is adapted from the training of professional nurses and inclusion of how the multidisciplinary team fits in the implementation of the nursing process.

7.4 SUMMARY

The summary details the sequence followed in conducting the whole study from the beginning to its final stage and are outlined as follows:

7.4.1 Purpose of the study

The main purpose of the study was to develop and implement a training programme for the nurses to improve the implementation of the nursing process in public hospitals in Limpopo Province, South Africa. The purpose was achieved by initially exploring and describing the practices of professional nurses during the implementation of the nursing process through a mixed-method approach. A concurrent parallel design was used wherein the qualitative strand the one-to-one semi-structured interviews were conducted to collect data and in the quantitative strand, a structured close-ended questionnaire was used to collect the data. The development of the conceptual framework for the training programme was grounded on the merged findings of the study. The training programme and the guidelines for implementing the training programme were developed to operationalise the programme.

All the phases of the study were carried out successfully. The initial literature review methodology was conducted to establish the elements of the practice-orientated theory outlined by Dickhoff *et al*, (1968).

7.4.2 Completion of the phases of the study

The researcher succeeded in carrying out all the phases of the study. A preliminary literature review was conducted that confirmed the components of the practice theory of Dickhoff *et al*, (1968). The first phase of this study was the situational analysis to explore and describe practices of the nurses during the implementation of the nursing profession during patient care. The researcher conducted a one-to-one semi-structured interview using an interview guide and closed-ended questionnaires to collect data from professional nurses at regional hospitals in the Limpopo Province. The interviews were audio-recorded to capture all information and field notes were written to capture non-

verbal cues transcribed verbatim was made of the audio records and was analysed using Tesch's' open coding method for qualitative data analysis where four themes and sub-themes were developed and presented narratively with the support of the literature.

Measures to ensure the trustworthiness of the study, credibility, conformability, dependability, and transferability were all considered and how they were ensured were detailed. The merged findings of the study revealed that quality patient care was not achieved, because there was a knowledge gap and a need for the development of a training programme for professional nurses to improve the implementation of the nursing process in public hospitals in the Limpopo Province.

During the second phase of the study, the conceptual framework was developed, guided by the merged findings of the study in Table 3.1 of the situational analysis phase in Chapter three of the study. The developed theoretical framework served as the basis for the development of the nursing process training programme and the guidelines that directed its implementation which is phase four in line with the SAQA guidelines. The final phase, phase four presented in this chapter was the implementation of the nursing process training programme with immediate evaluation of the training programme to verify if the training programme has achieved its intended objectives.

7.5 LIMITATIONS OF THE STUDY

The study was conducted in the regional public hospitals in the Limpopo Province. The findings were only limited to the regional hospitals in Limpopo Province. Therefore, the findings of this study cannot be generalised to all public hospitals in the Limpopo Province and other provinces in South Africa. The implementation phase of the training programme was planned to include professional nurses in other districts in the Limpopo Province, but it was conducted in one district because of the global COVID-19 pandemic. The plan was not executed exactly as initially planned in the training programme. This was due to mandatory restrictions and limitations which were enforced by the governments, to ensure the safety of all citizens in the province, in South Africa. The study aimed to develop a

training programme for professional nurses and did not include other categories of nurses involved in the implementation of the nursing process. Despite these limitations, the results of the study are deemed valuable to trigger other researchers to explore further on the nursing process and to be used as a reference for future research.

7.6 RECOMMENDATIONS

The recommendations outlined in this section are based on the following themes which emerged. The recommendations of this programme which are useful in the nursing practice in nursing care units, health service management, nursing education, and nursing research.

7.6.1 Recommendations based on the themes that emerged during data analysis

During data analysis, the following themes were developed and recommendations will be based on each theme.

Theme one: Implementation of the nursing process during care provision in the hospital wards

Theme one shows that nurses execute various activities during the initial contacts with patients and the roles of every team member are described based on their scope of practice. The formulation of the nursing diagnosis is based on the identified problems. Health education is also provided to patients and families as part of implementing the nursing process during patient care. The professional nurses are assisted by the audit team which monitors the implementation of the nursing process but to a lesser extent.

Recommendations based on Theme one

Professional nurses should continue performing their roles as guided by the scope of practice and to ensure all the other lower categories of nurses to follow their scope of practice, when rendering care to patients. The performance of activities such as the formulation of the nursing diagnosis and giving of health education should depend on the problems that were identified during the initial assessment of patients. The care of patients using the nursing process approach can be rendered from a multidisciplinary

team approach to ensure comprehensive patient care. The audit team in each hospital should ensure that there are continuous monitoring and evaluation of the implementation of the nursing process to improve its implementation during patient care.

Theme two: Challenges experienced during the implementation of the nursing process steps

Professional nurses experienced challenges with the formulation of the nursing diagnosis, this is related to a lack of knowledge and skill. During the assessment of patients, a lack of patient honesty in giving detailed history during assessment hinders professional nurses from implementing the nursing process effectively as this can lead to the formulation of a wrong nursing diagnosis. Professional nurses are having problems with the implementation of the steps of the nursing process due to factors such as a lack of training, lack of both human and material resources. There is a lack of consistency also the poor management support system in public hospitals in Limpopo Province.

Recommendations based on Theme two

This study recommends that professional nurses should be empowered with knowledge and skills through in-service training to effectively assess patients and formulate the nursing diagnoses. Thus, to enhance the quality patient care. The nurses need to be continuously supported through the provision of adequate human, equipment, and supplies to effectively implement the nursing process during patient care. The nursing management should motivate, support and appraise nurses who are implementing the nursing process during patient care for hospitals to achieve quality care in the public hospitals.

Theme three: Descriptions related to the recording during the implementation of the nursing process steps

A recording is considered an important aspect during the implementation of the nursing process and professional nurses are aware of activities that have to be recorded. Professional nurses know of the saying that “in nursing what is not recorded has not been done” but there were inconsistencies in the recording that were reported to be a

challenge, because of the gaps in patients' records. Record-keeping was found to be a challenge amongst nurses when implementing the nursing process during patient care.

Recommendations based on Theme three

The researcher has included the importance and principles of record-keeping in the nursing practice in the training programme. This should be carried out to ensure that professional nurses are able to manage records well during the implementation of the nursing process. The researcher recommends continuous mentoring, and support of all nurses implementing the nursing process to consider record-keeping as important during patient care. The study further recommends the adequate supply of nursing process recording material in hospitals to promote the complete recording. Continuous in-service training and workshops on record-keeping by experts in record issues and the introduction of electronic recording systems has the potential to improve record-keeping amongst nurses in hospitals.

Theme four: Strategies used by nurses to the quality implementation of the nursing process steps

Professional nurses who are implementing the nursing process during patient care have developed strategies to cope with the nursing process implementation challenges inherent in nursing practice. The professional nurses in each unit support each other, during the implementation steps of the nursing process. Although, that seems problematic through the creation of clear lines of communication. Accordingly, they can easily assist each other. The professional nurses also ensure that during the implementation of the nursing process, the lower nursing categories are restricted from performing certain activities alone without supervision by the professional nurse as a way of promoting quality health care.

Recommendations based on Theme four

The implementation of the nursing process by various categories of nurses is guided by the scope of practice of each nursing category. The researcher, therefore, recommends continuous adherence to the scope of practice by every category of nurses. Professional

nurses need a continued support and mentoring from the nurse managers. Thus, in return they can also be able to support their lower nursing categories that they supervise as leaders of patient care. The researcher further recommends keeping clear lines of communication amongst all categories of nurses to promote easy access to information. When nurses need assistance with issues related to the implementation of the nursing process during patient care. Professional nurses in the units need to continuously provide supervision to lower levels of the nursing staff to ensure that the care given to patients, when implementing the nursing process remains of the highest quality.

Theme five: Suggested solutions for improvement of the implementation of the nursing process steps

The professional nurses in the various hospitals suggested that the development of a training programme is viewed as the possible strategy that can improve the implementation of the nursing process during patient care. The content of the training programme was suggested based on the aspects of the nursing process that were considered problematic. Nurses further, suggested that the reinforcement of the teaching sessions, which seems neglected could also assist in empowering them with information, knowledge, and skills on the implementation of the nursing process. When training on the nursing process is initiated, professional nurses suggest that all categories of nurses should be included in that training as nurses work as a team, when implementing the nursing process guided by their scope of practice.

Recommendations based on Theme five

The researcher recommends continuous in-service training sessions for all nurses implementing the nursing process inpatient care to equip them with up to date information to improve their knowledge and skills. Nurse managers should provide supervision, monitoring, and evaluation of the teaching sessions that are provided in the units on nursing process implementation. Thus, to reinforce that continuity and consistency is maintained.

7.6.2 Recommendations to nursing practice in nursing care units and nursing management

The focus of the study was to develop and implement a training programme to improve implementation of the nursing process in public hospitals in Limpopo Province. Therefore, other aspects essential in providing quality patient care emerged during the analysis of the collected data. Challenges experienced by professional nurses when implementing the nursing process include a lack of both material and human resources as factors contributing to poor implementation of the nursing process. There are also poor record-keeping practices related to a lack of resources which also impacts negatively on patient care. The researcher, therefore, recommends that nursing management provide adequate equipment and recording materials to nurses in the units. The nursing management through the human resource management office to advocate for staff according to the staff establishment of the various units to reduce staff shortages. A well-staffed unit serves as therapeutic environments for boosting staff morale in achieving more during patient care.

The study, also revealed that there is no training programme on the nursing process and no in-service training in the public hospitals. As a result, the professional nurses are not empowered when performing their duties to enhance quality of care. Professional, personal growth and development of employees is a key element towards the provision of quality patient care which can be achieved through continuous in-service training of the nursing staff. The study further recommends that nursing management schedule continuous in-service training sessions for all categories of nurses to keep nurses abreast of the latest developments in their profession and promote quality. The researcher further recommends that the short training course developed for professional nurses ought to be adopted by the Department of Health in Limpopo Province. In consequence, it can be offered as a compulsory module offered during the induction of all newly qualified professional nurses in public hospitals.

7.6.3 Recommendations to nursing education

All categories of nurses are a product of nursing education and training institutions. Thus, the quality of patient care rendered to the patient through the implementation of the nursing process approach is dependent on the training that nursing education training institution offers. Their students should be equipped to ensure the implementation of the nursing process. The nursing schools, nursing colleges, and universities are all the nursing training institutions. Thus, they are upon the accreditation by SANC and Council of Higher Education. They are also entitled to provide education and training for various categories of nurses in South Africa. The researcher, therefore, recommends that the nursing process has to be introduced from the first level of training and be reinforced throughout training to produce highly competent nurses, who can effectively implement the nursing process during patient care. Hence, the achievement of the quality of patient care in public hospitals. The researcher also recommends that the short course should be included in the curriculum of all undergraduate nurse training. As this can create an opportunity to include all critical aspects during the facilitation of learning at the nursing training institutions.

7.6.4 Recommendations to nursing research

Research on implementation of the nursing process has been conducted around the globe but a few in the South African context. There was no research conducted in South Africa on the development and implementation of the training programme, to improve the implementation of the nursing process during patient care. The research could stimulate other researchers in the future to focus on perceptions of all categories of nurses towards the implementation of the nursing process. Thus, also develop a model for effective implementation of the nursing process during patient care in hospitals. Furthermore, research can be conducted to assess whether the nursing process training programme developed can also be implemented elsewhere and yield similar positive results.

7.7 CONCLUSION

In this chapter, the researcher illustrated that the aim and the objectives of the study were achieved. The researcher demonstrated interest, in the nursing process by implementing the training programme and its immediate evaluation passionately despite challenging circumstances of the COVID-19 pandemic. Indicating the limitations of the study, the recommendations, and conclusions within the South African context.

The aim of the study was to develop and implement the training programme to improve the implementation of the nursing process in public hospitals in Limpopo Province, South Africa. As the nurses constitute the largest number of health care workers in public hospitals responsible for the provision of quality patient care. The nursing process is a recommended approach towards achieving such quality. During the implementation of the nursing process, they require support and continuous training to improve their knowledge and skills. The positive results from a short training programme on the nursing process proved that nurses increased their knowledge and skills after the training that was adopted by all hospitals in Limpopo Province. This shows that if similar training can be implemented, this can yield good results hence the achievement of high-quality patient care.

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APPENDIX A: ETHICAL CLEARANCE CERTIFICATE



University of Limpopo
Department of Research Administration and Development
Private Bag X1106, Sovenga, 0727, South Africa
Tel: (015) 268 2212, Fax: (015) 268 2306, Email: noko.monene@ul.ac.za

TURFLOOP RESEARCH ETHICS COMMITTEE CLEARANCE CERTIFICATE

MEETING: 31 August 2017
PROJECT NUMBER: TREC/264/2017: PG

PROJECT:

Title: Development and implementation of a training programme to improve implementation of the nursing process in public hospitals of Limpopo Province, South Africa
Researcher: TE Mutshatshi
Supervisor: Prof TM Mothiba
Co-Supervisor: Prof RN Malema
School: Health Care Sciences
Degree: PhD in Health Sciences


PROF. TAB. MASHEGO

CHAIRPERSON: TURFLOOP RESEARCH ETHICS COMMITTEE

The Turfloop Research Ethics Committee (TREC) is registered with the National Health Research Ethics Council, Registration Number: REC-0310111-031

Note:

- i) Should any departure be contemplated from the research procedure as approved, the researcher(s) must re-submit the protocol to the committee.
- ii) The budget for the research will be considered separately from the protocol.
PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES.

**Appendix B: Request letter for permission to collect data department of health
Limpopo Province**

P. O.BOX 409

VHUFULI

0971

28 .09.2017

Dear Sir/Madam

REQUEST FOR PERMISSION TO CONDUCT A RESEARCH.

I, Mutshatshi Takalani Edith, Student NO: 201427037, a PHD student at the University of Limpopo hereby request permission to research public hospitals of Limpopo Province.

Research topic: Development and implementation of a training programme to improve implementation of the nursing process in public hospitals of Limpopo Province, South Africa

All the information received from participants and respondents will be treated confidentially and will be used solely for the research. This research will help the department of health by developing a training programme for professional nurses to improve the implementation of the nursing process in public hospitals and thus improve the quality of patient care. Should you need further information in the process of considering the request, please contact me or my supervisors.

Supervisor: Prof Mothiba T.M 073 256 5676

Co-supervisor: Prof Malema R N 082 200 5351

Yours, faithfully

Mrs. Mutshatshi T.E

Contact (083 689 0587)

E-mail: mutshatshit@gmail.com

Appendix C: Permission letter from the Limpopo Department of Health



LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HEALTH

Enquiries: Stols M.L (015 293 6169)

Ref:4/2/2

Mutshatsi TE (LP 2017 09 018)
P.O. Box 409
VHUFULI
0971

Greetings,

RE: Development and Implementation of a Training Programme to improve Implementation of the Nursing Process in Public Hospitals of Limpopo Province, South Africa

The above matter refers.

1. Permission to conduct the above mentioned study is hereby granted.
2. Kindly be informed that:-
 - Research must be loaded on the NHRD site (<http://nhrd.hst.org.za>) by the researcher.
 - Further arrangement should be made with the targeted institutions, after consultation with the District Executive Manager.
 - In the course of your study there should be no action that disrupts the services.
 - After completion of the study, it is mandatory that the findings should be submitted to the Department to serve as a resource.
 - The researcher should be prepared to assist in the interpretation and implementation of the study recommendation where possible.
 - The above approval is valid for a 3 year period.
 - If the proposal has been amended, a new approval should be sought from the Department of Health.
 - Kindly note, that the Department can withdraw the approval at any time.

Your cooperation will be highly appreciated.


Head of Department

13/10/2017
Date

Appendix D: Consent form

UNIVERSITY OF LIMPOPO (Turf loop Campus)

Statement concerning participation in a Research Project

Name of Study: Development and implementation of a training programme to improve implementation of the nursing process in public hospitals of Limpopo Province, South Africa

Information box:

Thank you for agreeing to participate in this study. My name is **Takalani Edith Mutshatshi**; I am a researcher from the University of Limpopo. This study aims to develop **and implementation of a training programme to improve the implementation of the nursing process in public hospitals of Limpopo Province, South Africa**. The study is non-invasive, and only questionnaires will be used to collect data. The objectives are to explore and describe the practices of professional nurses during the implementation of the nursing process in public hospitals of Limpopo Province. Participation in this study is completely voluntary and you may withdraw from it at any time and without supplying reasons.

Should you have any queries, kindly contact:

Mutshatshi T.E (083 689 0587)

I have heard the aims and objectives of the proposed study and was provided the opportunity to ask questions and given adequate time to rethink the issue. The aim and

objectives of the study are sufficiently clear to me. I have not been pressurized to participate in any way.

I understand that participation in this study is completely voluntary and that I may withdraw from it at any time and without supplying reasons. This will not influence the work that you do of caring for diabetes mellitus patients.

I know that this Study has been approved by the Turfloop Research and Ethics (TREC), University of Limpopo (Turfloop Campus). I am fully aware that the results of this study will be used for scientific purposes and may be published. I agree with this, provided my privacy is guaranteed.

I hereby give consent to participate in this study.

Name of patient/volunteer

Signature of patient

Place

Date

Witness.....

Appendix E: Interview guide

DEVELOPMENT AND IMPLEMENTATION OF A TRAINING PROGRAMME TO IMPROVE IMPLEMENTATION OF THE NURSING PROCESS IN PUBLIC HOSPITALS OF LIMPOPO PROVINCE, SOUTH AFRICA

Demographic information: Refer to Appendix H Section A

1. How do you implement the nursing process in your ward?

Probing questions

1. What are the challenges that you experience have when implementing the nursing process?

2. Can you share with me the training programmes the hospital has to improve the implementation of the nursing process?

4. Tell me, is there any aspect regarding the nursing process which you think you need to be trained on?

5. Do you have suggestions that you think can improve the implementation of the nursing process?

Appendix F: Interview transcript

NAME : PARTICIPANT 0012 DATE: 13.09.2018

TRANSCRIPTION LEGEND : RESEARCHER R

: INTERVIEWEE I

R Morning and how are you?

I I'm good. And you?

I I'm so fine. I'm Mrs. Mutshatshi from the University of Limpopo. I'm researching the development and implementation of a training program to improve the implementation of the nursing process in public hospitals of Limpopo. So, today like I've said, why are we, the objectives why I'm conducting this research and also requested for your content. So, I'm going to ask you questions, so, please feel free if you need to share any information concerning this study topic.

I You are welcome.

R So, how do you implement the nursing process here in your ward?

I When the patient comes in the ward we are already aware that the patient is coming with such a diagnose from casualty or OPD. And then our paperwork is ready for the patient which is our nursing process that is guiding us on the questions to ask the patient. Ja, and then from there we take the file of which the patient he came with from casualty. And then in our ward the patient are being classified according to their conditions. So, we put the patient in the right strip according to their condition. We went there, there is the family. We just give them the chat to see so that you can get the information there from them.

R Are you telling me you also collect information from the relatives?

I Yes. Yes, we collect that information from the relatives like confirming the name of that patient so that you can take that contact numbers. Sometimes some of our patients they came in a state of which they are, they are unable to communicate.

R Okay.

I Yes. So, our nursing process is the one that is guiding us, we are going step by step through our nursing process. Like if you can see our first page, ne? We are dealing with the information of the patient.

R Okay, it's fine. Okay. Then what information do you collect?

I Okay. According to our nursing process we first collect like, confirmation of the name of the patient and we compare the name of the patient from their relatives, and the one that is written on the brown file. Because some of our clients they do a mistake on this paper Their religion, we do ask the family or the patient whether is he a Christian or not. And then we also ask the name of the church, even physical address and the contact numbers. Ja, even if they are having their postal addresses we do write here

R Okay. Then what else do you do with regard to the nursing process?

I Okay. We continue with the second page, ne?. From there we check the nutritional pattern of the patient. And then we also go with the basic vital signs in the ward, because the moment the patient arrives in the ward the other nursing assistants has to go and do the vital signs of the patient.

R Okay. What basically do they do when they do vital signs? What is it that they're doing?

I They are taking the BP of the patient, then the weight of the patient. Even the height according to the nursing process. And then the respiration, also the temperature of the patient.

R Okay.

I And we also check the nutritional state of the patient.

R Okay. Is that all that you do when you assess your patient?

I I also check whether that diagnosis written there is the one related as in... Maybe the patient is having a diabetic foot I also ask the patient where is the problem? And then she will show me. Yes, I ask while observing.

R Okay. You collect the information from the patient?

I And then our objective data also include to check whether the patient is coughing or not, because some they come being coughing from long ago.

R Okay.

I Yes. And then our nursing process we are also having there where we write the admitting medical diagnosis that is written there by the doctor there in casualty. And then I also ask the social status of the patient. He's a pensioner? Is he working? Staying with who at home? Where are they getting the support? All those things.

R Is that all that you do when you assess the patient?

I Actually when I'm assessing them, like I've told you before, that we go through the steps of the nursing process. Yes, I also check the beliefs of that patient,

R You also ask them their value belief pattern?

- I Yes and then from there I identify the problem. I ask the patient. Actually, what was the reason that made you to come to the hospital
- R Okay. Are you telling me like when you're identifying the problem you only focus on those that the patient has told you?
- I No. I also observe the signs. Ja, I identify, and then I ask the patient, and I also observe. And then from those problems I observed, and I've been told by the patient, I come with the nursing diagnosis .
- R Okay, can you clarify the nursing diagnosis.
- I No, they identify the problems. And then I will conclude with my nursing diagnose so that I can prevent those complications, I mean potential nursing diagnosis.
- R Okay. Then you were talking about formulation of the nursing diagnosis. What is that? If you can share with me.
- I The formulation, ne? In my unit the way you formulate the nursing diagnose, we check the system that's affected to the patient. And then that system is affected, and then we check what was it that makes that system to be affected. Yes, and then we come with the evidence. Why are we saying that the system is affected?
- R Okay. you can give us an example. Just pick up an example.
- I Let's say the patient he came with the swollen testes, ja. Meaning there was alteration around the urinary tract system there is something that is triggered in there related to disease process. Meaning that our evidence that there is something wrong in the urinary tract system, is that swelling.
- R I get your point.

I In my unit we are taking our potential problems as, complications as like I've identified the problem. Let's say maybe the patient comes with pain, ne? If I don't treat that pain, the patient will be restless and goes into shock because I'm not treating the pain.

R Okay, I get your point.

I Yes. Or maybe I said the patient is most like he is having an anxiety attack, like he's in the new environment in the ward. He is feeling the machine, the hospital machines and then starting to be afraid. That person, maybe it can depress him.

R Okay. Okay, Is that all that you do?

I No, we continue. After assessment I have to plan for those problems, how am I going to treat those problems.

R Okay.

I Ja. My identified problems, I plan for them one by one. And then I write, and I identify the problem, the one I identified before. You have to give yourself timeframe to treat that patient because that patient is not supposed to stay with the problem.

R Okay.

I Okay. Like you are seeing my nursing process is identify problem, expected outcome which is the timeframe, and then what is it that I'm going to do to treat this problem. In my expected timeframe I give myself... Let's say if I've given myself seven days, after seven days I need to review, check that those planning I've done to the patient, is the patient healed or not. If the patient is healed during evaluation, meaning that my planning was good, I did the correct thing. But if the patient is not yet healed meaning I have to

go far by treating the patient. Maybe that's, in an example of the wound, maybe that ointment the doctor ordered is not working.

R Okay. So, you are saying you identify the problem, you get, you write your expected outcome and you plan?

I After, yes, I implement and then evaluate after that timeframe.

R Tell me, when does the issue of implementing the plan comes in?

I Actually, what's happening, ne? Is my problem, I'm treating a problem, and then day one I write on...that that page, meaning that after I've done all my planning's, ne? I come and implement what I've done. Meaning every time I do a thing to the patient I implement and record.

R Okay, I get your point.

I We are implementing and recording.

R Do you really record everything that you do?

I In some cases we don't record due to workload.

R Okay.

I You find yourself doing many, many things and then going back to record. The recording system is poor.

R Okay. You're saying reporting, the recording system is... poor.

I Yes, it's a challenge because if you can check you do many, many things a day, ne? But maybe you'll end up at the end of the day implementing one or two and if you did not record it means you did not do that, I mean that's how nursing is.

R Okay.

I The recording system is poor.

R What then, what do you do in case you find that the problem is not resolved?

I If it's not we re-plan. So you can go back and re-plan.

R Okay, I get you, that you go back and re-plan again.

I Yes. We go back and re-plan.

R Okay, okay. That's how you are doing the nursing process in the unit?

I Yes.

R So, what are the challenges that you experience when you implement this nursing process?

I The challenges, ne? Is that the patient was admitted by another professional nurse, and I'm not sure whether it's laziness or what, some of us we don't go and check the planning for that admission. And then if...Yes, we do plan on admission. But going back and checking and evaluating, it's a challenge.

R In other words, are you telling me that you do have challenges with evaluation?

I Yes. Implementing and recording is a challenge.

R Are those the only challenges that you do have when you implement the nursing process?

I Ja, I think in my unit. On admission, everything, we check everything. But after doing follow ups, especially in evaluation, it's a problem.

R Which means the main problem is evaluation and recording?

I Yes.

R Okay. Those are the only challenges that you do have here in the unit?

I Yes.

R So, if those are the only challenges that you have then it's fine. Can you share with me about the training program the hospital has to improve the nursing process implementation?

I I don't want to lie, I never been in that training scheme. Honestly there is no training program in the hospital for the nursing process. I mean we struggle with the nursing process issues. Nothing, nothing at all (*shaking head*)

R I, I see you even shaking you head.

I Yes, we are just given the nursing process forms. What you do, just follow what the nursing process is. Like fill in the form, name of the patient you write, age you write. The training, I never been on training, never.

R So, are you telling me or sharing with me that there is no training program?

I Training program, yes. There is no training program at all.

R Okay. So, tell me, is there any aspect of the nursing process which you think you need to be trained on?

I As a registered nurse? think there are many, many issues. The planning of the, the planning of nursing prescriptions, we need training.

R Okay, is that the only aspect that you think you need training?

- I The planning, and I don't know whether I will think. Even the evaluation, the important of evaluation like planning.
- R Those are the only two aspects that you think you can be trained on?
- I Trained on, yes. Because we can identify the problems but the planning...Is a problem? Yes. And also, the formulation of the nursing process, it's a challenge.
- R Okay.
- I Ja, the formulation of the nursing process, ah, nursing diagnose, it's a challenge. Because actually, we are not sure whether we have to write about the affected system or... And if we have to write about the affected system we are nurses, we have to do our...I mean, you have to deal with other things that you are doing. All the systems, the system, I think they are for doctors, I don't know.
- R So, you need to come up with really your nursing diagnosis?
- I Yes, on how to formulate our really nursing diagnose.
- R Okay, I get your point.
- I Yes.Yes, their own nursing diagnose.
- R Okay, I get your point now. So, do have any suggestions that you think can improve implementation of the nursing process?
- I The suggestion, I think if we can get some program for education about the nursing process as a whole.
- R Okay. What are you...? What do you mean by programs of education?

- I Like in-service trainings in the nursing process, there must be a training programme in place which is known by all nurses on when is the training taking place.
- R Okay. What are the other things that you think can really assist?
- I Yes, educational programs.
- R Is there any other thing that you think, you think you could suggest to improve implementation of the nursing process?
- I Also I think if there can be more staff, because you find yourself maybe in the ward, you are four sisters. And these beds, there's too much paperwork that they need from us. And we have to go through those areas, and then at the end of the day you find some of the things. Like I've told you that we do things, but no writing...
- R Is the challenge.
- I Ah, because you'll just... By the moment I'm busy writing maybe I'll be done with this patient helping, you are busy writing. The patient is calling asking for help. I can't sit down writing while the patient is in need. Okay. More staff. Yes, more staff.
- R Is there anything you like to share with me about the nursing process?
- I I think the nursing process is a good thing because it will make any nurse to know more the patient. The moment we are busy interviewing the patient we are getting to know more. Even if you are evaluating we do go to the patient and ask, are you still feeling pain?
- R Okay. Do you have any other thing to share with me?

I And the nursing process I think if we concentrate on it, ne? It makes the nurse to be more near to the patient because it's something that needs you and the patient to communicate with.

R So, if there's no other information that you want to share with me, thank you so much for your time.

Appendix G: Covering letter accompanying the self-administered questionnaire

Dear Sir/Madam,

TITLE: DEVELOPMENT AND IMPLEMENTATION OF A TRAINING PROGRAMME TO IMPROVE IMPLEMENTATION OF THE NURSING PROCESS IN PUBLIC HOSPITALS OF LIMPOPO PROVINCE, SOUTH AFRICA

This study is conducted as a requirement for the completion of the degree of Doctor of Philosophy in Health Care Sciences at University of Limpopo. The main purpose of this research is to development and implementation of a training programme to improve the implementation of nursing process in public hospitals of Limpopo province, South Africa. I would like to invite your participation in this study by filling up the attached questionnaire. All information provided will be handled strictly confidential and as such individuals who respond to this questionnaire will not be identified.

This activity will take approximately 30 to 45minutes and your participation will be very much appreciated.

Thank you for your contribution in participating in this study.

Kind regards

Mutshatshi T.E (Mrs)

Cell: 083 689 0587

Appendix H: Questionnaire

Development and implementation of a training programme to improve implementation of the nursing process in public hospitals of Limpopo Province, South Africa.

SECTION A: DEMOGRAPHIC INFORMATION

ID

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INSTRUCTION: Indicate your answer by making a cross (X) in the space provided.

Answer all the questions as honestly as possible and objectively.

A1. Gender	Male	
	Female	

A2. Age	20 – 29 years	
	30 - 39 years	
	40 – 49 years	
	50-59 years	
	≥60 years	

A3.Highest Qualification	educational	Diploma	
		Degree	
		Post basic/ Honours	
		Masters	

	Doctoral	
A4. Period of employment into the post of a professional nurse	1– 9 years	
	10– 19 years	
	20– 29 years	
	30– 39 years	
	≥ 40 years	

A5. Period of implementing nursing process	1– 9 years	
	10– 19 years	
	20– 29 years	
	30– 39 years	
	≥ 40 years	

SECTION B: IMPLEMENTATION OF THE NURSING PROCESS

ITEMS	Professional nurses' practices with regard to the implementation of the nursing process	Agree	Disagree	Not sure
B1	I can do subjective assessment of patients correctly			
B2	I can do objective assessment of patients correctly			
B3	I can prioritize patients' problems after assessment correctly			
B4	I can formulate correct NANDA nursing diagnosis after assessing patients			
B5	I can formulate correct potential nursing diagnosis			

B6	I can plan correct nursing actions in relation to nursing diagnosis			
ITEMS	Professional nurses' practices with regard to the implementation of the nursing process	Agree	Disagree	Not sure
B7	I can develop realistic goals/expected outcomes correctly			
B8	I can develop realistic time frames for identified problems correctly			
B9	I can implement planned nursing intervention timeously			
B10	I can evaluate care given to patients based on time frame			
B11	I can re-plan for patients' unresolved needs			

ITEMS	Professional nurses' practices with regard to the implementation of the nursing process	YES	NO	Not sure
B12	Recording is important in implementation of the nursing process			
B13	All nursing actions/interventions done by nurses in this hospital are recorded timeously in the patient file			
B14	Nurses keep clear , accurate and complete patient records at all times			
B15	Incomplete recording affect quality of patient care when implementing nursing process			
B16	Adequate provision of stationery can improve nursing process implementation			
B17	In nursing practice it is believed that "what is not recorded in the patient's file has not been done to the patient"			

SECTION C: TRAINING NEEDS ASSESMENT

INSTRUCTIONS: Please choose the appropriate response to each statement. Indicate your answer by making a cross (X) in the appropriate space provided.

C1. Have you ever undergone training on the nursing process?

Yes		No	
-----	--	----	--

C2. Indicate when last did you attend in-service training on the nursing process?

None	
Within last 6months	
6-12months	
>12 months	

C3. Do you attend workshops to improve implementation of the nursing process?

Yes	
No	

C4 How competent are you in implementing the nursing process approach to patient care?

Very competent	
Competent	
Not competent	

ITEMS	Assessment of professional nurses' training needs with regard to the nursing process	Agree	Disagree	Not sure
C5	The hospital has a staff training and development policy with regard to the nursing process.			
C6	The hospital has a formal training programme in place to improve implementation of the nursing process			
C7	The hospital conducts routine in-service training for professional nurses on the nursing process.			
C8	There is adequate management support for professional nurses who are implementing the nursing process in patient care.			
C9	Professional nurses are sent for seminars/workshops on practical implementation of the nursing process.			
C10	There are specific aspects of the nursing process which professional nurses need to be trained on			
C11	Development of a training programme can improve implementation of the nursing process			

THANK YOU

Appendix I: Certificate from independent coder

Qualitative data analysis

Doctor of Philosophy in Health Sciences

Mrs TE MUTSHATSHI

THIS IS TO CERTIFY THAT:

Professor Maria Sonto Maputle has co-coded the following qualitative data:

Unstructured one-to-one interviews

For the study:

**DEVELOPMENT AND IMPLEMENTATION OF A TRAINING PROGRAM
TO IMPROVE THE IMPLEMENTATION OF THE NURSING PROCESS IN
PUBLIC HOSPITALS OF LIMPOPO IN SOUTH AFRICA**

I declare that the candidate and I have reached consensus on the major themes reflected by the data during a consensus discussion meeting. I further declare that adequate data saturation was achieved as evidenced by repeating themes.

Prof MS Maputle



Appendix J:Written assessment test and marking guide

WRITTEN ASSESSMENT TEST AND MARKING GUIDE

PARTICIPANT NO:

TOTAL MARKS: [40]

DURATION: 45 MINUTES

MARKS OBTAINED.....

QUESTION 1

1.1 Explain the concept “Nursing process” (2)

.....
.....

1.2 List the steps of the nursing process (5)

.....
.....

1.3 Name three components of a nursing diagnosis (3)

.....
.....

1.4 Explain three the advantages of implementing nursing process approach during patient care (3)

.....
.....

1.5 List three legislations applied in nursing practice in South Africa (3)

.....
.....

1.6 Explain how the following ethical principles are ensured during implementation of the nursing process (4)

1.6.1 Privacy.....
.....

1.6.2 Informed consent.....
.....

1.6.3 Justice.....
.....

1.6.4 Confidentiality.....
.....

[20]

QUESTION 2

2.1 Formulate the nursing intervention with rationale for a patient with the following nursing diagnosis:

2.1.1 Ineffective airway clearance related to disease process as evidenced by coughing and noisy respiration (5)

.....
.....
.....
.....

2.1.2 Altered breathing patterns related to disease process as evidenced by fast breathing, fast pulse rate, difficulty in breathing (5)

.....
.....
.....
.....

2.2 Outline the importance of record keeping in nursing practice (5)

.....
.....
.....
.....
2.3 Explain the barriers to effective communication (5)

.....
.....
.....
.....
[20]

THANK YOU

WRITTEN TEST MARKING GUIDE

QUESTION 1

1.1 Explain the concept “Nursing process” (any one) (2)

- Nursing process is a systemic, patient-centered, and a scientific method of problem-solving to achieve maximum level of outcomes in provision care
- Nursing process is a systematic and rational method of planning which provides individualized care to patients, families, groups and communities.

•
1.2 List the steps of the nursing process (5)

- Assessment of the patient’s needs,
- Formulation of a nursing diagnosis,
- Planning to address the identified needs,
- Implementing the appropriate nursing interventions

- Evaluating the patient outcome

1.3 Name the components of a nursing diagnosis (3)

- The problem, existing or potential identified
- The etiologic factors/causative factor
- The signs and symptoms

1.4 Explain three the advantages of implementing nursing process approach during patient care (any three) (3)

- Allows the nurse to apply knowledge and skills in an organized and goal-directed manner.
- Enables the nursing care to transform from traditional methods of care into a scientific and patient-oriented approach
- The nursing process motivates nurses and promote active patient participation between nurses, patients and family
- Nursing process facilitates high-quality nursing care
- Serves as a tool for monitoring quality of care
- Promote multidisciplinary team approach to patient care
-

1.5 List any three legislations applied in nursing practice from a South African perspective (3)

- The Constitution of the Republic of South Africa, Act 108 of 1996
- The Nursing Act no 33 of 2005 as amended
- The South African Nursing Council Rules and Regulations, R2598
- The South African Nursing Council Rules and Regulations R387

1.6 Explain how the following ethical principles are ensured during implementation of the nursing process (4)

1.5.1 Privacy

- Through screens during history taking, physical examination and all other procedures

1.5.2 Informed consent

- Explanation of all procedures to the patients before procedure is done to obtain consent

1.5.3 Justice

- Treating patients without discrimination on gender, race, nationality, religion, social background etc

1.5.4 Confidentiality

- Avoiding disclosure of information given by patient to any other person except to colleagues who are treating of the patient

[20]

QUESTION 2

2.1 Formulate the nursing intervention for a with a patient with Pneumonia under the following nursing diagnosis:

2.1.1 Ineffective airway clearance related to disease process as evidenced by coughing and noisy respiration (any five) (5)

- Put patient in semi-Fowler's position to facilitate breathing
- Monitor vital signs, temperature, pulse and respiration 4 hourly
- Auscultate breaths sounds to rule out obstruction
- Encourage deep breathing exercises and coughing to clear chest
- Give extra fluids to liquefy secretions
- Suction patient to remove secretions
- Refer to physio therapy for chest physio

2.1.2 Altered breathing patterns related to disease process as evidenced by fast breathing, fast pulse rate, difficulty in breathing (any five) (5)

- Monitor vital signs temperature, pulse and respiration 4 hourly
- Put patient in semi-Fowler's position to facilitate breathing
- Give oxygen to improve breathing
- Schedule activities to promote periods of rest
- Monitor oxygen saturation levels
- Give prescribed medications
- Put patient on mechanical ventilation

2.2 Outline the importance of record keeping in nursing practice (5)

- Provide clear evidence of the care planned, the decisions made, the care delivered and the information shared
- Means of communication with members of the multidisciplinary team the patient's progress and continuity of care
- Recording of assessment, nursing intervention implemented, the outcome and the patient's response to interventions provide an indication that the nurse provided care.
- Enhance professional growth as nurses evaluate the effectiveness of their interventions.
- Serves as a legal document during lawsuits by patients and relatives

2.3 Explain the barriers to effective communication (any five) (5)

- Organisational structure – due to hierarchical management structure, lines of communication, lack of proper communication modes utilised to give information to the staff members.
- Language barriers – due to the fact that words have various meanings to different people or different cultural groups.

- Cultural barriers – example: female employee may come from a country in which she acts as subordinate to men resulting in being reluctant communicate and lead effectively.
- Poor judgement – judging statements of a particular person or a group.
- Heightened emotions – emotional reactions, physical conditions, insufficient light and past experiences can affect communication.
- Lack of ability to communicate – when skills to effectively communicate are lacking where training is needed.
- Resistance to change – individuals want to retain the status quo, they may they resist changing their old practices when new things are communicated to them.

[20]

TOTAL MARKS [40]

Appendix K: Skill assessment tool and marking guide

SKILL: AUDITING OF IMPLEMENTATION OF THE NURSING PROCESS MARKING GUIDE

PARTICIPANT NO:

MARKS: 30

DURATION: 20 MINUTES

At the end of the assessment, the student should be able to:

- Audit the nursing process records
- Verbalise the findings

INSRUCTION TO ASSESSOR

- Assess the learner auditing the nursing process implementation records

• ASSESSMENT	1	0	N/A
Subjective assessment <ul style="list-style-type: none">• History of current illness• Past medical history• Pharmacological history• Occupational history• Family history• Psychosocial history• Value belief pattern• History of immunisation Objective assessment <ul style="list-style-type: none">• Vital signs• Physical examination• Urinalysis			

<p>*Needs identified (are these relevant)</p> <ul style="list-style-type: none"> • Nursing diagnosis • Potential problems (are these relevant) 			
PLANNING	1	0	N/A
<p>*Plan addresses the need</p> <ul style="list-style-type: none"> • Plan realistic <p>* Target date for resolving the problem identified (time frame)</p> <ul style="list-style-type: none"> • Approved by registered nurse before implementation 			
1.3.3 IMPLEMENTATION	1	0	N/A
<p>*According to plan</p> <p>Record of the following:</p> <ul style="list-style-type: none"> • Date and time • Observations/treatment • Signature and designation 			
EVALUATION	1	0	N/A
<p>*Done for each identified problem</p> <ul style="list-style-type: none"> • Indicate resolved problems • Plan updated/re-planned where problem was not resolved (verbalize) • Signature and designation 			
PRINCIPLES OF RECORD KEEPING	1	0	N/A
<ul style="list-style-type: none"> • Tidiness • Arrangement (according to hospital policy) <p>*Completeness e.g. name of patient, hospital number, etc.</p> <p>*Legibility</p>			

TOTAL MARKS.....

MARKS OBTAINED:

PERCENTAGE: MARK OBTAINED X 100

23

REMARKS.....
.....
.....

SIGNATURE OF ASSESSOR:

Appendix L: Evaluation tool of the training programme

INSTRUCTION TO LEARNERS

Learners may not write names on the provided evaluation tool

Indicate what was interesting in the training program

.....
.....
.....
.....

Indicate what aspects were not interesting in the training programme

.....
.....
.....
.....

What aspects of the training programme do you think should be improved?

.....
.....
.....
.....

Share any other comments which were not asked in this evaluation tool which you think need attention by facilitator

.....
.....
.....
.....

THANK YOU

APPENDIX M: Facilitator manual

INTRODUCTION

Welcome to this Short training course on the nursing process implementation in nursing care units.

Course aims

This course aims to improve knowledge and skills on implementation of the nursing process during patient care amongst professional nurses in public hospitals. The combination of knowledge and skills covered by the course will enable participants to provide quality nursing care in hospitals and improve the overall quality of life of people. This course includes basic information on communication skills

Course structure

The training sessions can be delivered as a complete short training course all at one time. This would take about 40 hours, not including meal breaks. Alternatively, the sessions, which vary in length from 45 to 60 minutes

Learning Outcomes

The learning outcomes specified for this workshop will direct you in terms of what the workshop is aiming to achieve and what you have to accomplish. You are given the activities that you have to complete during the workshop. The outcomes also indicate the confirmation is needed to demonstrate that certain knowledge and skills have been acquired during this workshop.

Facilitator instructions

The instructions to the facilitators include the initiation of the course on the first day, presentation of the course, practica and writing assessments and evaluation of the course on the last day. This training manual is designed to fill a gap in the implementation of the

nursing process. The outcomes stated for this workshop will direct you to the aims of the workshop and what is to be achieved. There are activities to be completed during the workshop. You are given the activities that you have to complete during the workshop.

List of acronyms

- NANDA North America Nursing Diagnosis Association
- SLO Specific Learning Outcomes
- RTHC Road to Health Card

The program of the training programme workshop:

To open follow the link: [The programme of the Training Programme workshop.docx](#)

THE TRAINING PROGRAMME

Course: Short training course on the nursing process implementation in nursing care units		Contact hours:40 hours Credits: 5 NQF Level: 5 Venue:
Duration of the training sessions	The course will be conducted in five days Each session will have learning activities with interactive facilitation and some practical exercises which is patient file based	
Pre-requisites Learning assumed to be in place	The pre-requisites for this course are: <ul style="list-style-type: none"> • Basic knowledge and skills of the nursing process • Basic Communication skills at hospital ward level 	

	<ul style="list-style-type: none"> • Basic Interpersonal Relationship at the hospital ward level
Co-requisites Units of learning to contribute during the course	The co-requisites for the course are: <ul style="list-style-type: none"> • A professional nurse registered with the South African Nursing Council • English as a medium of instruction and communication • Ability to write and read in English
Course facilitator	Mutshatshi TE (Nurse Educator, PhD student) during study and trained trainers afterwards
Purpose of the course	The overall purpose of the course is to equip and improve professional nurses' knowledge, skills and update them with the latest activities and development in the implementation of the nursing process
Critical cross-field outcomes Course participants will be able to: <ul style="list-style-type: none"> • Identify and use problem-solving skills to solve problems related to the implementation of the nursing process. • Work effectively with others as a member of a team, group, organization, community to achieve learning objectives • Organizing and managing oneself responsibly and effectively • Collect, analyze and critically evaluate information • Reflect and explore learning strategies which are effective during the training • Use science and technology effectively and responsibly towards the achievement of the set goals 	

- Communicate effectively using visual, mathematical and/or language skills both oral and/or written persuasion
- Recognize that problem-solving contexts do not exist in isolation and work as a team member of the multidisciplinary healthcare team.

Course outline:

On completion of this training, the professional nurses as learners should be able to have achieved the following Specific Learning Outcome (SLO1 to 11):

SLO1. Explain the concept “nursing process”

SLO2. Explain the historical background of the nursing process.

SLO3. Explain the legal framework of nursing practice from a South African context:

3.1 The Constitution of the Republic of South Africa

3.2 The Nursing Act

3.3 The South African Nursing Council rules and regulations, R2598, R387

SLO4. Discuss the basic ethical principles relevant to nursing practice

SLO5. Outline and describe the different steps of the nursing process

SLO6. Explain the importance and general principles of record-keeping in nursing

SLO7. Define the concept “communication”

SLO8. Outline the types of communication

SLO9. Explain the barriers to effective communication

SLO10. Factors that influence communication

SLO11. Demonstrate understanding of the implementation of the nursing process

Specific Learning Outcome 1. Explain the concept “nursing process”

.1 Learning outcomes

At the end of the session participants should be able to:

- Explain the concept “nursing process”



Activity 1.1 Individual study

Find different sources in literature which describe the nursing process.

- Use personal experience to attend to the following:
- In a piece of paper explain what you understand by the concept “nursing process”.
 - Explain the advantages of implementing the nursing process during provision of patient care.
 - Discuss individual answer with the colleague sitting next to you
 - Each participant will report the partner’s answers
 - Assessment of individual answers
 - Consolidate all answers and reflect
 - Facilitator summarises the concepts and adds input

1.1 Explanation of the concept “nursing process”

- Nursing process is a systemic, patient-centered, and a scientific method of problem-solving to achieve maximum level of outcomes in provision care
- Nursing process is a systematic and rational method of planning which provides individualized care to patients, families, groups and communities.

Specific Learning Outcome 2. Discuss the historical background of the nursing process

2.1 Learning outcomes

At the end of the session participants should be able to:

- Explain the historical background of the nursing process.

Activity 2.1 Face to face lecture



Explanation of the historical background of the nursing process

- Facilitator consolidate SLO 1 and SLO 2
- Make a summary and give input.

2.2 Explain the historical background of the nursing process

- The utilization of the nursing process has spread rapidly across the globe since its inception in the early 1950s.
- Hall was the first to see nursing as a process and in 1960 Ida Jean Orlando defined the phases of the nursing process in terms of interpersonal relationships, while other nurses were exploring its philosophy and values
- The first identified steps of the nursing process were recorded in 1967 as assessment, planning, implementation, and evaluation
- The term nursing diagnosis was first used in 1974 after the first meeting of the group called North American Nursing Diagnosis Association (NANDA).
- In 1986 the nursing diagnosis was added to the previously- existing four steps of the nursing process.
- The nursing process is currently regarded as a framework within which the nurse must function, as set out by the South African Nursing Council Rules and Regulation on the Scope of Practice of professional nurses

Specific Learning Outcome 3. Explain the legal framework of nursing practice from the South African context

3.1 Learning outcomes

At the end of the session participants should be able to:

- Explain the legal framework of nursing practice from a South African context using the following sources:

Activity 3.1 Pre-reading and pre-knowledge assessment



- The Constitution of the Republic of South Africa, Act No. 108 of 1996 (chapter 2 section 27)
 - The Nursing Act, Act No. 33 of 2005
 - SANC Rules and Regulations R2598 (Scope of practice of a registered nurse).
- SANC Rules and Regulations R387 (Acts and omissions)
 - After reading Chapter 2 Section 27 of the Constitution of South Africa Act (No108 of 1996), explain the right to health care
 - Read R2598 and R387, you should be able to identify and describe the scope of practices of a registered nurse and acts and omissions during nursing practice upon which SANC can take disciplinary measures.
 - Divide into two groups and choose a group presenter for reporting time
 - Discuss the legal framework for nursing from the South African context
 - Focus on the Bill of Rights, the purpose of the nursing act, scope of practice and acts and omission

3.1 Explain the legal framework of nursing practice from the South African context

Nurses in South Africa are entitled to practice their profession within the legal parameters of the country

3.1.1 The Constitution of the Republic of South Africa, Act No.108 of 1996 (chapter 2 section 27)

- According to the Constitution of the Republic of South Africa (1996) Section 27(1) (a), states that every individual has the right to have access to quality health care services

3.1.2 The Nursing Act, Act No. 33 of 2005

- The purpose of this Act is to regulate the nursing profession and provides direction for other related matters.
- Amongst other objectives, the Act provides for training of properly qualified nurses who could serve the community with the highest level of competence.

3.1.3 SANC Rules and Regulations R2598 (Scope of practice of a registered nurse.

- The diagnosing of a health need and the prescribing, provision and execution of a nursing regimen to meet the need of a patient or group of patients or, where necessary, by referral to a registered person;
- The execution of a program of treatment or medication prescribed by a registered person for a patient;
- The treatment and care of and the administration of medicine to a patient, including the monitoring of the patient's vital signs and of his reaction to disease conditions, trauma, stress, anxiety, medication and treatment;
- The prevention of disease and promotion of health and family planning by teaching to and counselling with individuals and groups of persons;
- The prescribing, promotion or maintenance of hygiene, physical comfort and reassurance of the patient;
- The promotion of exercise, rest and sleep with a view to healing and rehabilitation of a patient;
- The facilitation of body mechanics and the prevention of bodily deformities in a patient in the execution of the nursing regimen;
- The supervision over and maintenance of a supply of oxygen to a patient;
- The supervision over and maintenance of fluid, electrolyte and acid base balance of a patient;
- The facilitation of the healing of wounds and fractures, the protection of the skin and the maintenance of sensory functions in a patient;
- The facilitation of the maintenance of bodily regulatory mechanisms and functions in a patient;

- The facilitation of the maintenance of nutrition of a patient;
- The supervision over and maintenance of elimination by a patient;
- The facilitation of communication by and with a patient in the execution of the nursing regimen;
- The facilitation of the attainment of optimum health for the individual, the family, groups and the community in the execution of the nursing regimen;
- The establishment and maintenance, in the execution of the nursing regimen, of an environment in which the physical and mental health of a patient is promoted;
- Preparation for and assistance with operative, diagnostic and therapeutic acts for the patient;
- The co-ordination of the health care regimens provided for the patient by other categories of health personnel;
- The provision of effective patient advocacy to enable the patient to obtain the health care he needs;
- Care of the dying patient and the care of a recently deceased patient within the execution of the nursing regimen.

3.1.4 SANC Rules and Regulations R387 (Acts and omissions)

Acts or omissions in respect of which the council can take disciplinary steps against a registered nurse.

- Wilful or negligent omission to carry out such acts in respect of the diagnosing, treatment, care, prescribing, collaborating, referral, co-ordinating and patient advocacy as the scope of his profession permits.
- Wilful or negligent omission to maintain the health status of a patient under his care or charge, and to protect the name, person and possessions of such a patient, through:

-correct patient identification;

(b) determining the health status of the patient

- (c) the correct administration of treatment, medication and care;
- (d) the prevention of accidents, injury or other trauma;
- (e) the prevention of the spread of infection;
- (f) the checking of all forms of diagnostic and therapeutic interventions for the individual;
- (g) specific care and treatment of the very ill, the disturbed, the confused, the aged, infants and children, the unconscious patient, the patient with communication problems and the vulnerable and high-risk patient; and
- (h) the monitoring of all the vital signs of the patient concerned.
 - Wilful or negligent omission to keep clear and accurate records of all actions which he performs in connection with a patient.
 - Alleging to perform the acts of a person registered in terms of the Medical, Dental and Supplementary Health Service Professions Act, 1974 (Act 56 of 1974), and the Pharmacy Act, 1974 (Act 53 of 1974), unless the nurse is also registered in such a capacity.

Specific Learning Outcome 4. Discuss the basic ethical principles in nursing practice

4.1 Learning outcomes

At the end of the session participants should be able to:

- Explain the following basic ethical principles relevant to nursing practice and add more principles thereof.

Activity 4.1 Group activity



Divide yourselves into three groups

- Identify concepts used in ethics, write them down and explain each concept.
- Indicate whether any of the identified concepts were used since you have been appointed as professional nurses or not.
- If yes, explain how it has been used. Also, explain how one could apply the

ethical concepts during patient care in the wards.

- One group member to present your discussion
- The facilitator summarizes and gives inputs

The following are some concepts related to ethics but not limited to the following:

4.1.1 Privacy

4.1.2 Informed consent

4.1.3 Confidentiality

4.1.4 Beneficence

4.1.5 Non-maleficence

4.1.6 Justice

4.1.7 Veracity

4.1.8 Non-maleficent

Activity 4.2 Group activity



- Divide yourself into two groups
- share the basic ethical issues relevant to nursing practice and how they are implemented during patient care
- One group member to present your discussion
- The facilitator summarizes and gives inputs

4.2 Explain the following basic ethical principles relevant to nursing practice and how they are ensured during nursing practice

- **Privacy**

Privacy is defined as the broader of the concepts and includes the right to be free from interference

Ensured through use of screens during history taking, physical examination and all other procedures

- **Informed consent**

Informed consent are permissions granted in full knowledge of the possible consequences The consent is obtained verbally and in writing

Ensured through explanation of all procedures to the patients before procedure is done to obtain consent

- **Confidentiality**

Confidentiality is the right to rely on the trust of an individual and to control access to and disclosure of private information entrusted to that individual

Ensured through avoiding disclosure of information given by patient to any other person except to colleagues who are treating of the patient

- **Beneficence**

Beneficence means doing well. The principle implies that

patients must be cared for in a way that prevent possible harm

ensured through keeping patients safe from any form of harm, physically and psychologically

- **Non-maleficence**

Maleficence means harmful and this principle

requires avoidance of to harm intentionally, through lack of knowledge or negligence.

Ensured through utilising appropriate knowledge and skills to keep patients safe at all times and avoiding any form of harm

- **Justice**

The principle of justice refers to fair treatment and the avoidance of discrimination bases on gender, race, nationality, religion, etc.

Ensured through treating patients without discrimination on gender, race, nationality, religion, social background etc.

- **Veracity**

Means being truthful

Ensured by telling patients the truth and not giving them false hopes about condition and prognosis

Specific Learning Outcome 5. Outline and describe the steps of the nursing process

5.1 Learning outcomes

At the end of the session participants should be able to:

- Outline and describe the different steps of the nursing process

5.1.1 Assessment

5.1.2 Formulation of nursing diagnosis using the NANDA approach

5.1.3 Planning

5.1.4 Implementation

5.1.5 Evaluation



Activity 5.1 Pre-knowledge assessment

- In a piece of paper, use your experience to individually outline the steps of the nursing process.
- Indicate the three main components to be considered when you formulate a nursing diagnosis
- Give two examples of nursing diagnosis using NANDA approach



Activity 5.2 Case study

Assemble in two groups and discuss the following:

Maria, 30 years old female patient is admitted in the ward with shortness of breath. Her mother is a known Asthmatic patient on treatment. Vital signs are as follows: temperature 36.5 degree Celsius, pulse 140b/minute, respiration 36 breaths/minute, Oxygen saturation 70%. On examination, she has wheezy respiration. The doctor diagnosed her as having Acute Asthma.

Using the provided assessment and nursing care plan form:

- Record the vital data of this patient

- List the identified problems
- Identify the system that is affected in Maria 's case
- Formulate the nursing diagnosis of this patient using NANDA approach
- Formulate the potential nursing diagnosis using NANDA approach
- Draw the nursing care plan for this patient

5.1 Outline and describe the different steps of the nursing process

Assessment

- Assessment is the initial step of the nursing process, which is an on-going
- Entails collection, organization, validation and documentation of data collected from patient
- Includes subjective where data is collected from the patient and significant others and objective data where the nurse utilize assessment technique such as inspection, palpation, percussion, and auscultation to physically examine the patient's
- The intellectual judgment of the nurse depends on complete and accurate data collection to ensure effective analysis of collected information.

Formulation of nursing diagnosis

- The nursing diagnosis is a statement of the patient's problems that requires nursing interventions
- Is the nurse's clinical judgment about the client's response to actual problem existing at the time of assessment and or a potential problem that could arise in the future.
- Nursing diagnosis includes the evaluation of subjective and objective data.
- Consist of a statement of the problem, a description of related or supportive factors that describe causative factors and the presenting signs and symptoms.

Planning

- The nurse assign priorities to the nursing diagnosis and highest priorities are assigned to problems that are urgent and very critical such as airway,
- Specifying objectives or expected outcomes
- Setting the time frames
- Selecting nursing actions,
- Drawing up of a nursing care plan.
- Planning can be short-term and long-term coupled with an expected outcome

Implementation

- Implementation step represents the 'action phase' or doing the phase of the nursing process
- The nurse engages in activities to accomplish the desired goal. This implementation consists of carrying out and documenting all the specific nursing interventions as planned
- Clear instructions for care planning and nurse's roles are necessary for effective implementation.

Evaluation

- The evaluation a continuous process assessing whether objectives have been achieved or not
- If the goals are not met, re-planning must be to improve the nursing care given to the patient.
- The final phase, where judgment or appraisal is made and is an ongoing activity
- Evaluation is a continuous process done throughout the phases of the nursing process

Indicate the three main components to be considered when you formulate a nursing diagnosis

- The problem, existing or potential identified
- The etiologic factors/causative factor
- The signs and symptoms

Give two examples of nursing diagnosis using NANDA approach

- Ineffective airway clearance due to obstruction as evidenced by inability to clear airway, coughing, noisy respiration
- Fluid volume deficit related to disease process as evidenced by dehydration, loss of skin elasticity, cracked lips, excessive thirst

Activity 5.3 Group discussion



Emma is a 1year old admitted in the unit with a diagnosis of full-thickness burns. She has blisters all over her face and chest. Her vital signs now are Pulse 65, Respiration 20, Temp 36.7°C. she is crying severely and refusing the breast . No Road to Health Card(RTHC) is available.

Complete all the activities with your group members and then one group member to present to the class

- Explain the subjective data will you collect from Emma's mother
- Which objective assessment will you conduct on Emma?
- List all the identified problems for this patient
- Identify the systems affected in Emma's case
- Formulate the nursing diagnosis for Emma using the NANDA approach
- Plan the nursing intervention for this patient
- Which health education advice can you give to Emma's mother
- identify any other members of the multidisciplinary team who can participate in Emma' care

Subjective assessment

- History of current illness
- Past medical history

- Pharmacological history
- Occupational history
- Family history
- Psychosocial history
- Value belief pattern
- History of immunisation

Objective assessment

- Vital signs
- Physical examination
- Urinalysis

Identify the systems affected in Emma's case

The integumentary

Avoid pricking blisters

Give extra fluids

Formulate the nursing diagnosis for Emma using the NANDA approach

- Skin integrity impairment related to disease process as evidenced by blisters
- Comfort alteration due to disease process as evidenced by crying and refusal of breastfeeding
- Risk for wound infection related to disease process evidenced by elevated temperature

Plan the nursing intervention for this patient

- Monitor vital signs 4 hourly
- Dress wound using aseptic technique to prevent infection
- Nurse child in an isolation unit to prevent infection
- Avoid pricking blisters to retain fluids and proteins
- Give extra fluids for rehydration
- Give analgesics for pain

Which health education advice can you give to Emma's mother

- Health education on prevention of home accidents

Identify any other members of the multidisciplinary team who can participate in Emma' care

- Doctors, nurses, Dietician, Psychologist, Physiotherapist

Specific Learning Outcome 6. Explain the importance and principles of record-keeping in nursing practice

6.1 Learning outcomes

At the end of the session participants should be able to:

- Explain the importance of record-keeping in nursing practice
- Explain principles of record keeping

Activity 6.1 Role play



An enrolled nurse monitored vital signs for a critically ill patient and did not record in the patient's file. The doctor is reviewing the patient and the temperature is not recorded. The nurse insisted that the temperature was monitored but she forgot to record it.

Share amongst the group members the roles of a doctor, an enrolled nurse, and a professional nurse in this scenario. De-role after the role play

As a professional nurse in charge of the unit:

- List types of records in nursing practice
- Explain to the nurse the importance of record-keeping in nursing practice
- Explain the general principles of record-keeping

6.1 List types of records in nursing practice

- Patients clinical record, Ward records, Administrative records

Explain the importance of record-keeping in nursing practice

- Provide clear evidence of the care planned, the decisions made, the care delivered and the information shared
- Means of communication with members of the multidisciplinary team the patient's progress and continuity of care
- Recording of assessment, nursing intervention implemented, the outcome and the patient's response to interventions provide an indication that the nurse provided care.
- Enhance professional growth as nurses evaluate the effectiveness of their interventions.
- Serves as a legal document during lawsuits by patients and relatives

Explain the general principles of record-keeping

- Tidiness-records must be neat and tidy
- Completeness e.g. name of patient, hospital number, etc.
- Legibility-visible hand writing
- Accuracy-entails the correct information

Specific Learning Outcome 7 Define the concept “communication”

7.1 Learning outcomes

At the end of the session participants should be able to:

7.1.1 Define the concept “communication”

The following concepts related to communication must be explained:

- Sender
- Message
- Recipient

Activity 7.1 Role play



Select two volunteers to demonstrate the communication process in a role play

- Ask the class to identify concepts related to communication
- Evaluate whether this communication was effective or not and give a rationale

7.1 The following concepts related to communication must be explained:

- Communication- the process of imparting or exchanging of information by speaking, writing, or using some other medium.
- Sender- he originator of message
- Message- the transformation of thoughts into words that sender sends to receiver
- Recipient- the recipient of the message from the sender.

Specific Learning Outcome 8. Outline the types of communication and communication techniques

8.1 Learning outcomes

At the end of the session participants should be able to:

- Outline the types of communication
- Explain the communication techniques used in nursing practice

Activity 8.1 Group discussion



- Divide the class into two groups
- Discuss the types of communications
- Let one member in each group present what was discussed in the group

- Facilitator to summarize and add input

Activity 8.2 Face to face lecture



Teach a group of learners the communication techniques used in nursing.

Communication techniques include:

- Written communication
- Verbal communication
- Non-verbal communication

8.2 Communication techniques

- **Verbal communication-** expressed through clarity, vocabulary, relevance and humour.
- **Non-verbal communication-** transferred through meta-communication, personal appearance, facial expression, posture, walk, gestures and touch.
- **Written communication** -can be withdrawn and/or restored.

Specific Learning Outcome 9. Explain the barriers to effective communication

9.1 Learning outcomes

At the end of the session participants should be able to:

Explain the barriers to effective communication

Activity 9.1 Group activity



Explain the barriers to effective communication

- Divide participants into two groups and discuss the barriers to effective communication.
- The participants choose a scribe and a presenter.
- The barriers to effective communication are presented to the class

9.1 Explain the barriers to effective communication

- Organisational structure – due to hierarchical management structure, lines of communication, lack of proper communication modes utilised to give information to the staff members.
- Language barriers – due to the fact that words have various meanings to different people or different cultural groups.
- Cultural barriers – example: female employee may come from a country in which she acts as subordinate to men resulting in being reluctant to communicate and lead effectively.
- Poor judgement – judging statements of a particular person or a group.
- Heightened emotions – emotional reactions, physical conditions, insufficient light and past experiences can affect communication.
- Lack of ability to communicate – when skills to effectively communicate are lacking where training is needed.
- Resistance to change – it is when individuals want to retain the status quo, they may resist changing their old practices when new things are communicated to them.

Specific Learning Outcome 10. Factors that influence communication

10.1 Learning outcomes

At the end of the session participants should be able to:

- Explain the factors that influence communication



Activity 10.1 Individual activity

Find different sources of literature which describe these topics:

Each participant is expected to write all factors that influence communication

- Assessment of individual answers
- Write down the individual answers

- Consolidate on answers and reflect

10.1 Factors that influence communication:

- Values - are standards which influence behaviour.
- Emotions- an individual's independent feelings about events.
- Socio-cultural background- which influences ways of performing things.
- Gender- has an excessive influence on listeners' behaviour.
- Perceptions- personal views of events which an individual interprets, senses and understands.
- Environment- a comfortable environment enables good communication.
- Knowledge- of handling diverse levels of people is important in communication.
- Effectiveness of communication- more effective if the participants are aware of their roles.

Specific Learning Outcome 11. Demonstrate understanding of the nursing process implementation

11.1 Learning outcomes

At the end of the session participants should be able to:

- Demonstrate auditing of a nursing process in a patient file
- Demonstrate knowledge of implementation of the nursing process in a written test



Activity 11.1 Individual skill/practical assessment

Each learner to be assessed on a skill of auditing the patient 's file on implementation of the nursing process.

Practica assessment tool and marking guide. **To open follow the link:** [Practica assessment tool and marking guide.docx](#)



Activity 11.2 Individual assessment test

Each learner to complete an individual written test on implementation of the nursing process

Written assessment test and marking guide. **To open follow the link:** [Written assessment test and marking guide.docx](#)

11. EVALUATION OF THE TRAINING PROGRAMME

Activity 11.3 Evaluation of the training programme



Each learner is give opportunity to evaluate the training programme

- Complete an individual evaluation tool to evaluate the training programme. To open follow the link: [Evaluation tool for the Training Programme.docx](#)

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APPENDIX N: Editing certificate





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To whom it may concern,

This document certifies that the dissertation was professionally edited for: Mrs. Mutshatshi T. E

This editing certificate is meant to acknowledge that we, Dr. E. J Malatji and Mrs. K. L Malatji a professional Editors under a registered company RightMove Multimedia, have meticulously edited the Dissertation of Mrs. Mutshatshi (201427037) Doctor of Philosophy in Health sciences at the university of Limpopo. Entitled: "DEVELOPMENT AND IMPLEMENTATION OF A TRAINING PROGRAMME TO IMPROVE IMPLEMENTATION OF THE NURSING PROCESS IN PUBLIC HOSPITALS OF LIMPOPO PROVINCE, SOUTH AFRICA"

Thus, I confirm that the readability of this work in question is of a high standard.

Sincerely, Mrs. K. L Malatji

