

**UTILISATION OF RESEARCH FINDINGS IN PRACTICE: PROFESSIONAL NURSES'
PERSPECTIVES**

by

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DECLARATION

I declare that **UTILISATION OF RESEARCH FINDINGS IN PRACTICE: PROFESSIONAL NURSES' PERSPECTIVES** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references and that this work has not been submitted before for any other degree at any other institution.

A handwritten signature in black ink, appearing to read 'Hlengiwe Petronella Mngomezulu', is written on a light blue rectangular background.

SIGNATURE

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UTILISATION OF RESEARCH FINDINGS IN PRACTICE: PROFESSIONAL NURSES' PERSPECTIVES

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ABSTRACT

Background: Research is essential for the development of a unique body of knowledge, a hall mark of any profession. It should be utilised to provide the basis for professional theory and practice.

Aim: The purpose of the study was to develop guidelines that will assist professional nurses in the utilisation of research findings.

Design and setting: Quantitative, descriptive research was used to determine professional nurses' (N=284) perception of utilization of research findings in practice. The structured questionnaire was used to collect data. Data were analysed using Statistical Package for the Social Sciences (SPSS) version 23 since this is a quantitative study. The study focused on professional nurses at the two selected hospitals that were providing the comprehensive programme in the uMgungundlovu district.

Results: 284 respondents answered the questionnaire. Of the respondents, 73.3% agreed that they lacked knowledge of research. The frequency of respondents that lacked research knowledge was 208. Of the respondents, 211 (74.3%) recommended use of research findings in practice versus 24 (8.5%) who were unsure and 9 (3%) respectively who did not know whether research should be used or not.

Conclusions: The findings revealed that there is a need for changes to be made in the nursing education system to try and improve research utilisation by professional nurses in practice since the professional nurses working in the clinical area are produced by nursing education institutions.

Key concepts

Utilisation; research; findings; professional nurses; nursing education institutions.

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LIST OF ABBREVIATIONS

AACN	Association of Critical Care Nurses
AHRQ	Agency for Health care Research and Quality
ANA	American Nurses' Association
BSN	British student nurses
EBP	Evidence-based care
HEI	Higher Education Institution
KT	Knowledge translation
KZN	KwaZulu-Natal
OSDs	Occupational specific dispensations
RNs	Registered nurses
RU	Research utilisation
SANC	South African Nursing Council
UNISA	University of South Africa

CHAPTER 1

OVERVIEW OF THE STUDY

1.1 INTRODUCTION

Research is essential for the development of a unique body of knowledge. It is a hall mark of any profession. It should be utilised to provide the basis for professional theory and practice. No profession can adequately improve control over or evaluate neither its practice without research, nor can education system advance without it. (Polit & Beck 2012:26). This is supported by the study conducted by McCloskey (2008:29) who endorsed that research findings are essential for the nursing profession and assist in the achievement of organisational vision and mission. This study aimed at determining whether research based findings are utilised to improve patients' outcomes at two health institutions in KwaZulu-Natal Province.

As nurses form the foundation for effective health care, it should follow that student nurses and newly qualified nurses utilise research findings in their daily nursing practice (Christie, Hamill & Power 2012:2791). This will assist nurses who are knowledgeable about application of research in their practice.

Despite the intense growth of research based nursing practice internationally (USA, Europe), South African nurses are unable to base their practice on research findings. Since research is important for the development of any profession, it should form an integral part of nursing care practice and research-mindedness. This should therefore be instilled in-nursing care professionals throughout their training (Mellish, Brink & Paton 2003:324).

Research utilisation (RU) in newly graduated registered nurses has been identified as being conspicuously low in previous population-based longitudinal studies (Forsman, Rudman, Gustavsson, Ehrenberg & Wallin 2012:1). Forsman et al (2012:10) further stated that about 50% of the nurses one, two, and three years after graduation rated their use of research in clinical practice as low or very low. Furthermore, the results

indicated that low users tended to become even lower over time between the first and second year after graduation (Forsman, Rudman, Gustavsson, Ehrenberg & Wallin 2012:1).

Some patients like to be told that there is a new way of doing a particular nursing care. That alone is therapeutic to them, because they believe that this will speed up recovery unlike knowing that, now and again if 'I' go to hospital, I will have all the machines by me and many 'pills'. The advancement in research affirms that certain aspects of nursing care do not necessarily require extensive medicine and all the machines for checking vital signs (Meyer, Naudé, Shangase & Van Niekerk 2009:345).

Research utilisation is commonly assumed to have a positive impact on patient outcomes by assisting with eliminating ineffective and potentially harmful practices, and implementing more effective (research-based) practices. However, we can only determine if patient outcomes are truly sensitive to varying levels of research utilisation if we can first reliably and validly measure research utilisation. If patient outcomes are sensitive to nurses' use of research as hypothesised and we do not measure it, we essentially ignore a mechanism that may influence research utilisation and by association, improve patient and other outcomes (Squires 2011:24). These casual mechanisms, once identified, can and should be used to develop theoretically based research utilisation interventions that have a better than random chance of improving patient and other outcomes.

Patients, as stated by Fox, Bagley, Day, Holleran and Handrahan (2011:623) often rely on health care professionals and institutions for their safety and well-being and in order to create safe and high quality health care environments. The Institute of Medicine (IOM) focuses on patient safety by promoting implementation of best practice policies. Therefore, it is founded on evidence-base science research findings.

The idea of sharing clinical experiences to improve patient care is not new to nurses. Florence Nightingale published her observations on cleanliness, nutrition, and fresh air in *Notes on Nursing* in 1860. Her work was the start of evidence-based nursing practice. More than 150 years and thousands of studies later, the use of evidence to guide nursing practice is the expected standard of practice for both individual nurses and health care organisations (Peterson, Barnason, Donnelly, Hill, Miley, Riggs & Whiteman

2014:58). Despite these efforts, barriers inhibit implementation of changes based on published evidence into bedside patient care. Overall, the barriers involve the characteristics of the nursing profession, organisational dynamics, and the nature of the research.

Squires (2011:24) assert that literature explicitly addressing research utilisation measurement generally, and within nursing specifically, is limited. The three gaps identified were lack of conceptual clarity, lack of pluralism (multiple methods) in measurement, and lack of reliability and validity assessment of knowledge (research) utilisation instruments which is why the researcher in the study is concerned about knowing the perspectives on the utilisation of research findings and even developed a questionnaire wherein questions on the utilisation of research findings if any should be identified.

1.2 BACKGROUND OF THE PROBLEM

Nursing research is of vital significance in the nursing profession. It assists nurses to base specific nursing actions and decisions on evidence indicating that the actions taken are clinically appropriate and cost-effective (Polit & Beck 2012:3) and this will give positive outcomes for the clients/patients.

The nurses have always used the systematic inquiry for patient care; for instance, the pioneer of nursing profession, Florence Nightingale used the systematic inquiry to inform nursing practice as early as 1850s. Similarly, Burns and Grove (2010:16) and Polit and Beck (2012:6) both supported the historical events influencing nursing research as the event which started in the time of Florence Nightingale in the early 1850s. This then made the researcher to find an in-depth understanding of the utilisation of research findings.

Polit and Beck (2012:7) confirm that in the 1970s, there was a decided change in the emphasis in nursing research from areas such as teaching, curriculum and nurses themselves to the improvement of client care. This then signified the growing awareness by nurses of the need of the scientific base from which to practice, which is why the researcher is concerned about the utilisation of research findings by professional nurses.

Internationally, nurses are expected to provide clinical care of high quality. For instance, this is practiced in Sweden whereby registered nurses are required by law to perform care based on research findings (Johansson, Fogelberg & Wadensten 2010:70). However, there were barriers identified in the utilisation of research. Common barriers were related to the characteristics of the organisation; insufficient time for nurses to implement ideas was the most frequent barrier. Furthermore, Johansson et al (2010:70) also state that lack of authority to change patient care procedures and lack of interest on the part of leaders and management were among barriers to research utilisation. Moreover, Meyer et al (2009:60) argue that research is one of the functions of the unit manager. However, it is a very important part of the function of a professional nurse as many research problems in nursing can be identified in clinical setting, since it is where the research findings are implemented to improve patient care.

Like in all countries of the World, South Africa regards research as an important function of the professional nurse. The South African Nursing Council which is the body that controls nursing in South Africa, states that one of the functions, among others, is that of understanding research as part of professional nurse's training.

The researcher noticed the utilisation of research finding as the core of good nursing practice which then without the professional nurses' participation, this will not yield the good results. The global standards for the initial education of professional nurses and midwives are intended to serve as a benchmark for moving education and learning systems forward in order to produce a common competency-based outcome in an age of increasing globalisation (SANC 2005:2).

Nursing education and training across South Africa is responding to changing needs developments, priorities and expectations in health and health care.

This then enables professional nurses to keep abreast with the current research findings in their practice. Nurses who acquire the knowledge, skills and behaviours that meet nursing standards will be equipped to meet present and future challenges, improve health and wellbeing of patients and drive up standards and quality, working in a range of roles including practitioner, educator, leader and researcher. Professional nurses, as autonomous practitioners, will provide essential care of a very high standard and provide complex care using the best available research findings.

Peterson et al (2014:58) argue that currently, Association of Critical Care Nurses (AACN) is the largest specialty nursing organisation and a leader in the movement to improve patient care by applying the best scientific evidence. In 1995, AACN began to publish Protocols for Practice, an evidence-based resource for clinical nurses. Each protocol provides a guide for appropriate selection of patients, use and application of management principles, initial and ongoing monitoring, discontinuation of therapies or interventions and selected aspects of quality control (Peterson et al 2014:58). The protocols have covered topics such as hemodynamic monitoring and care for patients treated with mechanical ventilation. Subsequently, a volunteer workgroup was formed to connect clinicians with research to improve care of critically ill patients.

Utilisation of research findings is ideally important in improvement of patient's care as this will significantly reduce increased morbidity and mortality rate and also curb the prolonged stay in hospital thus reducing hospital expenditure. However, in the experience of the researcher, the utilisation of research findings has not been the recent practice in the institution wherein the researcher is working which then made the researcher to conduct the study on this research topic.

According to Chinomso and Foluso (2014:185), studies found out that only few nurses are engaged in research and this has led to the sluggish growth experienced in nursing profession. Increased knowledge and use of this knowledge derived through research, empowers the nurse to contribute positively to the care and ensure better health outcome in patient. Nwozichi et al (2014:185) further said the problem remains that there is a significant gap between nursing research and its application to practice. Nurses who are not engaged in evidence-based practice tend to practice routines and nursing rituals. Many of these unnecessary rituals are still present and are practiced by some nurses in health care despite availability of research-based knowledge and interventions.

In this study, the researcher will therefore look at two public hospitals used for clinical learning experiences of students at the UMgungundlovu District of KwaZulu-Natal.

1.3 STATEMENT OF THE RESEARCH PROBLEM

Despite the intense growth of research based nursing practice internationally (USA, Europe), South African nurses are unable to base their practice on research findings. The researcher has noticed the accelerated development of technological advances internationally, which therefore necessitates utilisation of research-based knowledge today. In contrast, South African nurses have not been adequately exposed to such advances. Research based practice allows for rapid acquisition of new knowledge and team learning which can then keep professional nurses abreast with the scientifically proven practice. This is currently lacking in our South African nursing curriculum. This has been noted by the researcher as follows:

From the time the researcher started to work at the nursing campus, she has noticed that this research programme started in 1986 in to being part of the subject and it is incorporated in the third year curriculum. The researcher wondered, what about those nurses who today are Registered nurses and have not been exposed to research and what will happen if they pursue to further their studies in nursing and they only start looking at this 'research' at the post- graduation level and have not been exposed to it. The researcher looked at professional nurses who are expected to be knowledgeable and have not been exposed to research during training as professional nurses. A number of researchers have focused on ways to improve the knowledge of nurses in the research domain. This is supported by the cross-sectional study of Eizenberg (2011:33) which explores the relationship between nurses' personal and professional factors and research in nursing practice.

There is abundance of research from students doing basic, post-basic diploma and postgraduate degree during training as they are given the research project to complete and there is yet no system put in place of reporting between nursing colleges and hospitals. The only research that is looked at and implemented in practice is that of the medical doctors.

The researcher as mentioned in Chapter 1 of this study that nursing college 'research' is done as a mini-project only in third year of training. A number of ideas and concerns come to mind related to curriculum development and not isolating research in this undergraduate course and thinking. This can be relooked at in the nursing curriculum

and consider how critical research appraisal can be integrated into each and every learning experience and level of training since this is a limitation.

1.4 AIM AND OBJECTIVES OF THE STUDY

The purpose of the study is to determine views that will assist professional nurses in the utilisation of research findings in two public hospitals wherein nurse training is done in the uMgungundlovu District in KwaZulu-Natal.

The specific objectives of this study are to

- determine professional nurses' perception of utilisation of research findings in practice
- determine professional nurses' perspectives on how research findings can be utilised in practice
- determine research findings utilised in practice to positively influence patients' outcome

1.5 SIGNIFICANCE OF THE STUDY

Health care professionals are expected to provide quality patient care based on scientific evidence as the foundation of their practice. Utilisation of research findings is important because it will improve patient outcome and patient stay in hospital will not be prolonged and thereby decreasing hospital expenditure.

The contribution that this study could make to the nursing profession is to sensitise and reinforce the utilisation of research findings by professional nurses, given their role in mentoring and developing nurses to implement scientific based knowledge in their practice.

Aboshaiqah, Qasim, AlBashaireh and Patala (2014:1136) state that findings of their study on nurses' perception of barriers to research utilisation in a public hospital should provide a basis for organisation in designing programmes aimed at promoting the conduct of research and utilisation of its findings to further improve the quality of patient care services. Therefore, the researcher confirms this significance in this study.

1.6 DEFINITIONS OF KEY CONCEPTS

Professional nurse

A professional nurse means a person registered as such in terms of section 31 (SANC 2005:6). In this study, professional nurses will be the registered nurses who are currently licensed with SANC working at the two public hospitals in uMgungundlovu District in KwaZulu-Natal Province.

Registered nurse

'Registered person' shall mean a person who is registered as a nurse or as a midwife in terms of the Act or as a medical practitioner or dentist in terms of the Medical, Dental and Supplemental Health Service Professions Act, 1974 (Act 58 of 1974) (SANC 1978 Paragraph 1(8)). A registered nurse in this study will mean a professional nurse working at the two public institutions whereby the researcher will conduct the study and some of these registered nurses are employed as professional nurses.

Operational manager

The new rank designation for Chief Professional Nurses who are supervising a cluster of clinics at the hospitals is Operational Manager Nursing Grade 1 and 2 as the case may be (Human Resource Circular 102/2007:2). In this study, an Operational Manager will mean a professional nurse in-charge of the ward or clinic who was the former unit manager before the implementation of the occupational specific dispensations (OSDs) in 2007 at the two public hospitals in the uMgungundlovu District in KwaZulu-Natal Province.

Student nurse

A nurse means a person registered in a category under section 31(1) in order to practice nursing or midwifery (SANC 2005:6). In this study, this will be the nurse undergoing training at the selected public institutions where nursing training is done to become the registered nurse on successful completion of the training.

Perceptions

Perception relates to the way one notices things especially with the senses (*Oxford Advanced Learner's Dictionary* 2010:1087). In the context of this study, perceptions refer to how professional nurses interpret, understand or apprehend utilisation of research findings.

Utilisation

Utilisation is defined as using something for a practical purpose (*Oxford Advanced Learner's Dictionary* 2010:1646). In this study, utilisation denotes the professional nurses' utilisation of research findings in practice.

Research

Research is a systematic inquiry that uses disciplined methods to answer questions or solve problems (Polit & Beck 2012:3).

Findings

Findings are conclusions reached as a result of an inquiry, investigations or trial (*Oxford South African Pocket Dictionary* 2006:332). In this study, the researcher refers findings to the outcome which research utilisation will have in practice with regard to patient care.

Practice

Practice is defined as the work, business, or a place of work of a doctor, dentist, or a lawyer (*Oxford South African Pocket Dictionary* 2006:698). In this study, practice refers to the clinical area, the ward or nursing education institution whereby research findings will be applied or utilised.

Research-based knowledge in practice

A clinical problem-solving strategy that emphasises the integration of best available evidence from disciplined research with clinical expertise and patient preferences (Polit & Beck 2012:727). In this study, the researcher will define this concept as the knowledge acquired by professional nurses through research utilisation in practice.

Hospital

A hospital is an institution providing medical treatment and nursing care for the sick or injured people (*Oxford South African Pocket Dictionary* 2006:432). The researcher in this study will use the hospital as the place where the professional nurses are employed and licenced to practice as registered nurses by the South African Nursing Council.

1.7 OVERVIEW OF RESEARCH DESIGN AND METHODOLOGY

This is just an overview since a detailed research approach and methodology is described in Chapter 3.

1.7.1 Research design

According to Polit and Beck (2012:765) and De Vos, Strydom, Fouché and Delport (2011:142), a research design is the overall plan for addressing a research question, including specifications for enhancing the study integrity. A non-experimental, quantitative and descriptive study was used in this study.

1.7.2 Study population

Polit and Beck (2012:761) and Burns and Grove (2005:714) define the population as the entire set of individuals or objects having some common characteristics. In this study, the population included professional nurses at two public hospitals that are providing clinical learning experience for students doing the nurse training.

1.7.3 Sample size

A non-probability sampling approach was used to select a sample of professional nurses.

1.7.4 Data collection

The research data was collected using structured questionnaires over a period of two weeks.

1.7.5 Data analysis

Data were analysed using Statistical Package for Social Sciences (SPSS) version 23.0 with the assistance of the professional statistician. The collected data was checked for completeness. All incomplete questionnaires will not be used in the study. The remaining data were numerically coded. In addition, coding will be used to organise data collected as soon as data collection begins. The reliability of coding will be done by having another person encoding the same data and then checking for agreement. The researcher will categorise the data. Developing categories will be facilitated through the use of manual activity, where all recorded information will be thoroughly reviewed.

1.7.6 Reliability

Polit and Beck (2012:196) define reliability as the accuracy and consistency of information obtained. Some researchers define reliability as dependability and this occurs when an instrument measures the same thing more than once and the results in the same outcomes (Salkind 2006:106 cited in De Vos, Strydom, Fouché & Delport 2011:177). The questionnaire was pre-tested on professional nurses to ensure reliability of data collection instruments. This pre-testing was done before the actual study.

1.7.7 Validity

Validity is a more complex concept that broadly concerns the soundness of the study's evidence; whether the findings are unbiased, cogent and well grounded (Polit & Beck

2012:196). According to Babbie (2007:146), cited in De Vos et al (2011:172), validity refers to the extent to which an empirical measure adequately reflects the real meaning of the concept under consideration. The questionnaire was pre-tested on a number of professional nurses in order to enhance validity.

1.7.8 Ethical considerations

Application for permission to conduct a study in two public hospitals was submitted to KwaZulu-Natal Department of Health Ethics Committee (Annexure D) and permission was sought from the Hospital Managers and Nursing Managers of the two selected hospitals (Annexure B). A verbal consent from the respondents was obtained and respondents were also asked to sign the consent form (Annexure G).

1.8 SCOPE AND LIMITATION OF THE STUDY

The study was conducted only in two selected public hospital of the KwaZulu-Natal. It is not possible to generalise the findings of the study to the entire Republic of South Africa as they might only be applicable to the hospitals in the KwaZulu-Natal Province where the study was conducted.

This research was limited to studying the perspectives of the professional nurses on the utilisation of research findings in practice. A purposive sampling was used in the selection of respondents.

1.9 CONCLUSION

This chapter provides the introductory information of the study whereby the reader was oriented on the background to the study, problem statement, aims and objectives of the study as well as the significance of the study. This again proves that research in practice is important in patient care.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

The literature review provides a framework for establishing the importance of the study as well as a benchmark for comparing the results with other findings (Creswell 2012:25). Research is rarely conducted in a vacuum since the researcher usually conducts a thorough review of the literature in order to familiarise himself or herself with the existing knowledge base (Polit & Beck 2013:112). According to Burns and Grove (2005:93), a review of the existing literature related to a specific study is a critical step that the researcher has to undertake in the research process. It is essential that the researcher's work be built on the work of others in order to gather what is currently known regarding the topic.

Mouton (2006:87) states that the starting point should be the reviewing of existing scholarship or the available body of knowledge, to see how other scholars have investigated the research problem in which one is interested. In a nutshell, the researcher is interested in the most recent, credible and relevant scholarship in her area of interest.

The purpose of this literature review is to examine what is known about the phenomenon of research utilisation in practice, to state the root causes presented in the literature to identify empirical indicators found in the literature that could be used to measure the effects of utilisation of research findings in practice to improve patient outcome (Chinomso & Foluso 2014:185).

The literature review focuses on relevant literature on the utilisation of research findings in practice: professional nurses' perspectives and aspects related to nursing research nationally and internationally as well as the barriers to the utilisation of research findings are included. Therefore, the researcher comprehends utilisation of research findings as being associated with high quality nursing practice.

A search for relevant literature was undertaken with the assistance of the library search from the University of South Africa (UNISA) and use of the internet. Various keywords relevant to the research topic were used to guide the search for any relevant literature, such as research findings, utilisation and practice. CINAHL, Google Scholar, EBSCO host, and Curationis databases were used as search gadgets.

2.2 NURSING RESEARCH DEFINED

According to Polit and Beck (2012:3), nursing research is systematic inquiry to develop knowledge about issues of importance to nurses. Nurses are adopting an evidence-based practice (EBP) that incorporates research findings into their clinical decisions. It has been noted in the last 30 years that the practice of nursing has been trending from relying on expert opinion to the application of clinical research (Schmidt & Brown 2009 cited in Llasus 2011:4). The goal of EBP is to analyse research, examine its clinical relevance, and integrate the findings into practice (Schmidt & Brown 2009). Knowledge of nursing research enhances the professional practice of both consumers of research who read and evaluate studies and also produce research. In this study, the researcher felt there is a dire need to find out more from the professional nurses what their perspectives are with regards to the utilisation of research findings in practice as we are living in a changing world, change in the implementation of patient care.

Nursing research initiatives have generated new knowledge on increasing safe, cost-effective, efficient, and high-quality patient care. However, Baken and Jones (2006), cited in Llasus (2011:30), identified that a gap remains between the volumes of work produced as they stated that the translation of research evidence in practice is still an ongoing challenge.

In both nursing and medicine, several books have been written to facilitate evidence-based practice, and these books categorise studies in terms of the types of information needed by clinicians (DiCenso et al 2005; Guyatt et al 2008; Melnyk & Fineout-Overholt 2011 cited in Polit & Beck 2012:37).

Using data from the United States of America and the Netherlands, Grol and Grimshaw (2003) cited in Bohman, Ericsson and Borglin (2012:525) reported that 30-40% of all patients do not receive health care based on current relevant knowledge and as much

as 20-25% of all patients receive harmful or unnecessary care. In supporting this view, Bakken and Jones (2006), cited in Llasus (2011:28) suggest that it is essential that new knowledge be translated and incorporated into clinical practice to improve health care. The construct of knowledge translation (KT) provides an organising framework for this study. Knowledge translation is about facilitating the uptake of research (Tetroe 2007 cited in Llasus 2011:31). In addition, the emphasis on EBP in health care delivery increased the expectation that nurses utilise research findings and apply those findings to patient care (Tetroe 2007 cited in Llasus 2011:31). This is supported by Hain and Kear (2015:11), who contend that nursing and health care organisations require that patient care be based upon evidence. For this study, the term 'knowledge translation' will represent a process of moving EBP knowledge to EBP implementation among graduating students. Knowledge of EBP as a process and its implementation is seen as the content that is imbedded in the process of KT among graduating BSN students.

Research utilisation (RU) in newly graduated registered nurses has been identified as being conspicuously low in previous population-based longitudinal studies. About 50% of the nurses one, two, and three years after graduation rated their use of research in clinical practice as low or very low further. The results indicated that low users tended to become even lower over time between the first and second year after graduation (Forsman et al 2012:1). In addition, research utilisation is commonly assumed to have a positive impact on patient outcomes by assisting with eliminating ineffective and potentially harmful practices, and implementing more effective (research-based) practices. However, we can only determine if patient outcomes are truly sensitive to varying levels of research utilisation if we can first reliably and validly measure research utilisation. This is supported by Meyer et al (2009:344), whereby they define research as a purposeful scientific, diligent and systematic investigation aimed at creating new knowledge that can be implemented to improve health care by means of understanding, explaining, assessing, evaluating nursing issues, problems and planning for the future.

The researcher as mentioned in Chapter 1 of this study that nursing college 'research' is done as a mini-project only in third year of training. A number of ideas and concerns come to mind related to curriculum development and not isolating research in this undergraduate course and thinking. This can be relooked at in the nursing curriculum and consider how critical research appraisal can be integrated into each and every learning experience and level of training since this is a limitation.

2.3 HISTORICAL BACKGROUND OF NURSING RESEARCH

According to Polit and Beck (2012:50), Florence Nightingale made effective use of the outcomes of systematic inquiry to inform nursing practice (Small 1998). Melnyk, Fineout-Overholt, Stone and Ackerman (2000) as stated in Nickerson and Thirkettle (2013:18) assert that momentum for basing nursing practice on scientific evidence grew most noticeably in the 1970s and became widely known as research utilisation. Research utilisation involves analysis and critique of published research and involves efforts to apply some portion of the findings to nursing practice (Polit & Beck 2012:25).

Evidence-based practice differs from research utilisation in that it is a more rigorous process involving the use of a body of evidence (versus individual studies) for a particular clinical question. During the 1980s, research utilisation emerged as an important buzz word (Polit & Beck 2012:26). Changes in nursing education and research were prompted by the desire to develop a knowledge base for nursing practice. In education, nursing schools began to include courses on research methods so that students would become dexterous research consumers. In research, there was a shift in focus towards clinical nursing problems yet, concerns about the limited use of research evidence in the delivery of nursing care continued to mount (Polit & Beck 2012:26). Such concerns were fuelled by studies suggesting that nurses were often unaware of research findings or did not incorporate evidence into their practice (Polit & Beck 2012:26). Historically, nurses have relied on 'expert' opinions of seasoned nurses in clinical decision-making (Kania-Lachance et al 2006 cited in Majid, Foo, Luyt, Shang, Theng, Chang, Mokhtar, Luyt, Chang & Teng 2013:68).

2.4 NURSING RESEARCH INTERNATIONAL VERSUS NURSING RESEARCH IN SOUTH AFRICA

2.4.1 Nursing research internationally

Most studies conducted internationally show that research utilisation is beneficial. Heaslip, Hewitt-Taylor and Rowe (2012:1341) confirm that using the current based evidence to inform practice is considered to be an essential part of providing good quality care, Fink et al (2005), Thompson et al (2005) and Bonner and Sando (2008) cited in Heaslip et al (2012:1341), further argue that there is a variety of ways in which a

culture of research use can be developed, including nurses having knowledge of the research process, confidence in evaluating research and opportunities to participate in research and practice development activities.

Other factors, such as staff having, the opportunity to search for information and read and discuss research reports with colleagues can also facilitate a culture in which using research to guide practice is a core and valued aspect of day-to-day practice (Adamsen et al 2003; Fink et al 2005; Thompson et al 2005 cited in Heaslip et al 2012:1341).

Furthermore, the study conducted in Western Switzerland whereby the aim was to gain a better understanding of the motivations of pregnant women utilising moxibustion for breech presentation and to measure the impact of research results regarding the alternative medicine revealed that 93% versus 8% of women reported treating themselves at least once with complementary and alternative medicine (Guittier, Pichon, Irion, Guillemin & Boulvain 2012:1147). This moxibustion is a technique from Traditional Chinese Medicine which is often considered to encourage foetal turning thereby increasing the likelihood of a vaginal birth (Guittier et al 2012:1148). It is through this study which again confirms the necessity of the utilisation of research findings since the technique reduced the number of caesarean sections in pregnant women with breech presentations.

In Belfast, there has been increasing attention placed on how the use of evidence in practice can lead to better outcomes for patients (Wilkinson, Rycroft-Malone, Davies, McCormack 2012:195). The international knowledge utilisation colloquia met annually to explore the challenges of knowledge utilisation in health care since 2000 (Wilkinson et al 2012:195). This proves how research is looked at to better the lives of patients in practice considering the fact that these meetings were held annually.

In Netherlands, local authorities are required by law to develop local health memoranda, based on epidemiological analyses. The purpose is to assess the actual use of these epidemiological reports by municipal health officials and associated factors that affect the use thereof (De Goude, Van Bon-Martens, Puttens & Van Oers 2012:109). The results show that local health officials use epidemiological research more often in a conceptual than an instrumental or symbolic way. Furthermore, the results of this study

provided a partial solution to understanding and influencing research utilisation (De Goede et al 2012:109).

According to De Goede et al (2012:109), many health professionals perceive research utilisation as important for improving health at population level, related to the increasing importance of the concept of evidence based policy (EBP). The municipal health officials assumed that EBP will offer the best possibilities for improving population health. In some countries, nursing research is well developed and acknowledged as a legitimate and necessary basis for nursing activities (Gallagher, Sasso, Bagnasco & Aleo 2014:857).

Christie, Hamill and Power (2012:2789) agree adding that evidence-based practice may use information from many sources, including research. Research utilisation concerns the translation of research findings into practice. Thus, evidence-based practice may not be solely research-based and hence more than research utilisation. Research remains an important ingredient in ensuring quality and cost-effective care and an academic requirement for nursing students undertaking a science degree-level qualification (Christie et al 2012:2789). Research should be fully embedded throughout nursing curricula beyond the confines of 'research classes' integrating learning in academic and practice-based settings (Christie et al 2012:2789). This supports what the researcher has observed which necessitated the study on the utilisation of research findings taking into consideration that 'this' research is only done as a mini-project at a diploma level.

According to Prior, Wilkinson and Neville (2010:14) International Nursing Organisations identify evidence-based practice as a key strategy for creating integrated health models and for developing the recognition of nurses as important providers of health care (Jutel 2008 cited in Prior et al 2010:14). Following a similar trend in New Zealand, the Nursing Council of New Zealand includes evidence-based knowledge; education and research in their competencies for the registered nurse's scope of practice (Nursing Council of New Zealand 2007 cited in Prior et al 2010:14). Graduating nurses are required to have an understanding of the fundamental principles of research, research methods and sources of information and have the ability to apply research evidence to practice or undertake research to inform practice. However, in New Zealand very little is known about practising nurse's attitudes toward EBP. Of those studies conducted in primary health care settings, the views and attitudes of general practitioners to EBP were

examined (Prior et al 2010:15). The findings from this study demonstrate that knowledge and skills relevant to the implementation of EBP, nurses' attitudes towards EBP and the educational preparation of the nurses were important factors influencing the practice of individual components of EBP. In the same study conducted in New Zealand, significant relationships were identified between the knowledge and skills relevant to the implementation of EBP, the practice of individual components of EBP and having a tertiary qualification as a route to registration as a registered nurse or post-registration (Prior et al 2010:16).

These findings suggest that education positively influences nurses' understanding of research as well as the skills required to critically appraise and/or undertake research, and translate findings into practice. It is then through this study whereby the researcher decided to know more about others' views on the utilisation of research findings in practice and to understand what is happening about research utilisation internationally and in South Africa and therefore, did an in-depth review of literature with regards to this.

A study conducted in Sweden of nursing students and registered nurses in which the purpose was to identify factors that predict the probability for low research utilisation among registered nurses two years after graduation (Forsman et al 2012:2). Research utilisation (RU) in newly graduated registered nurses has been identified as being conspicuously low in about 50% of the nurses one, two, and three years after graduation rated their use of research in clinical practice as low or very low.

The results indicated that low users tended to become even lower over time between the first and second year after graduation (Forsman et al 2012:2). After various educational reforms, evidence-based nursing and research utilisation are strongly emphasised internationally in nursing education.

However, a number of challenges remain regarding the content of nursing education and the transition from education into working life; for example, the integration of education and practice as well as the ability of students to access and interpret evidence. Some of the challenges faced by these Swedish nurses and registered nurses among others were inadequate facilities for implementation, lack of time to read

research and insufficient time on the job for implementation of new ideas (Forsman et al 2012:2).

Challenges in the workplace will always be there so that the possible solutions are established to deal with the encounters. Challenges can also be the opportunities for making improvements and adjustment so that patient care is not compromised. Furthermore, these potential challenges can make one to grow professionally and academically. For instance, Aboshaiqah et al (2014:1138) found that insufficient time on the job to implement new ideas was the first of the top 10 on research findings in Saudi Arabia.

Nursing research is seen as a unified part of professional nursing, and results from nursing research can contribute to the development and renewal of patient care as well as the development of nursing education and leadership in clinical practice (Bohman et al 2012:525). Nursing and Health Care Organisations require that patient care be based upon evidence (Hain & Kear 2015:11). However, studies conducted in the United States and the Netherlands indicate that 30% to 40% of patients do not receive care in line with the latest research and that 20% to 25% of the care provided is inadequate and in some cases even dangerous (Bohman et al 2012:525).

The findings of the study conducted among a sample of physical therapists regarding research utilisation in Swedish primary care were that attitudes toward EBP and guidelines were in general very positive, although self-reported behaviour did not fully reflect this, and that awareness of and perceived access to guidelines and other EBP resources were limited (Bernhardsson, Larsson, Eggerlsen, Olsen, Johansson, Nilsen, Nordeman, Van Tulder & Öberg 2014:349).

Squires (2011:2) conducted a study in Canada to support the importance of nurses' use of research findings to the provision of quality care. Furthermore, there is evidence to demonstrate that the delivery of in-patient nursing care influences patient outcomes. For example, lower rates of in-patient mortality, shorter hospital stays, and reduced numbers of complications among patients in acute care settings have been documented within nursing homes, decreased restraint use, falls, contractures, and pressure ulcers have also been documented. Although these findings clearly link the delivery of nursing care to better patient outcomes, what is less obvious, are the mechanisms by which this

occurs (Squires 2011:2). To date, research conducted in this area has focused on determining which nursing care delivery factors (individual and organisational) have direct and independent statistical associations with outcomes of patient, staff, system level and, as a result, has largely ignored this gap.

A study was conducted in Australia to describe the experiences of 14 clinical nursing leaders introducing a knowledge translation (KT) project into one metropolitan acute care hospital in South Australia (Breimaier, Halfens & Lohrmann 2011:1749). In addition, the study also explored team members and service managers' experiences. Nurses who most frequently indicated wishes regarding research implementation indicated adequate information, structural availability and professional support. Special points of interest were topics concerning nursing phenomena and interventions (Breimaier et al 2011:1749).⁵

The majority and far more nurses than in other published studies (Parahoo 1998; 1999; Olade 2004) cited in Breimaier et al (2011:1749) stated that they seldom or never used research results in their practice during the past years. These findings show that nursing science in Austria is still in its infancy in development and emphasise the necessity to overcome this gross underutilisation. Furthermore, Breimaier et al (2011:1753) contend that a considerably large group of nursing staff do not use consciously research results in daily practice, and assumes that the requirements to provide best possible care at the lowest possible cost in an environment of limited resources are rarely met.

A study conducted in United Kingdom on occupational therapists' views and perceptions of evidence based practice (EBP) has been published. However, there has been little research with the same purposes focusing on therapists who work in rural areas in the UK (Hu 2012:620). Respondents' opinions regarding 16 statements concerning EBP were asked, and overwhelmingly positive attitudes to EBP were identified, as it is the basis for the professions' existence and guidance for practice (Hu 2012:620). Of those respondents who had 10 years or more work experience, believed that strong research activities should be included in the profession's education (Hu 2012:620). However, almost two thirds of respondents disagreed or were unsure that research findings inform practice. Moreover, a good size of respondents agreed that their professional journals/conferences should have more articles on clinical practice and less on research

and it was wasting time and resources on research when it could be used to work on more important professional issues, particularly those with an undergraduate degree. Therefore, how to integrate research findings into practice is the priority in future training, and a focus on multifaceted and innovative approaches, including their effectiveness, is important in promoting utilisation of research findings.

In the United States, an estimated 73,697 school nurses provide leadership in the provision of health care in the school setting. School nurses face challenges, such as providing quality health care in an educational setting and working in isolation. Journal clubs are one strategy to help incorporate evidence into practice (Sortedahl 2012:117). Respondents increased their knowledge of evidence-based practice and shared evidence with stakeholders. Moreover, respondents also intended to and did use evidence in practice, including prioritising based evidence.

According to Sortedahl (2012:117), one of the most successful features was connecting authors of the articles directly to respondents. Although all nurses face increased pressure to adopt evidence-based health care practices, school nurses have the additional challenge of providing health care in an educational setting, thus working in physical isolation from the health care sector (Adams & Barron 2009 cited in Sortedahl 2012:118). The results indicate that the journal club did have an impact on EBP. Respondents shared the information with others and actively used the evidence in practice. The researcher views all this information of the utilisation of research as of vital importance, since from the reviewed literature; it shows and confirms the dire need for research utilisation as a measure of improving effective patient outcome.

Generally, policy makers have not considered nursing research as an essential priority to reform the nursing services. For this reason, nurses continue to struggle with political barriers to change (Uysal, Temel, Ardahan & Ozkahraman 2010:1744).

Currently, the majority of practicing nurses in Turkey do not have an undergraduate degree but hold a diploma in nursing. Most nurses receive a technically-oriented education with no focus on research or its implementation (Uysal et al 2010:1744). Evidence-based practice may use information from many sources, including research. Research utilisation entails the translation of research findings into practice. Thus, while evidence-base practice may not be solely research-based and hence more than

research utilisation, research remains an important ingredient in ensuring quality and cost-effective care (Christie et al 2012:2789). A qualified nurse is responsible and accountable for providing safe, person-centred, evidenced-based care, therefore there is a need to consider how to best develop research knowledge and utilisation skills in undergraduate nursing students. Some authors indicate that lack of research knowledge during nurse training contributes to poor research utilisation by qualified nurses (Rutledge et al 1998; Closset et al 2000; Marsh et al 2001 cited in Christie et al 2012:2789).

Research access and understanding are not sufficient to ensure that research is used in practice. Mattila and Eriksson (2007) cited in Christie et al (2012:2791) state that undergraduates are under-committed to research due to little exposure to research use in clinical practice.

The importance of research cannot be underestimated. This is also supported by Cottler, Jo Mcloskey, Aguilar-Gaxiola, Bennet, Hal, Dawyer-White, Strelnick, Collyar, Ajinkya, Seifer, O'Leary, Striley and Evanoff (2013:1685) whereby the focus of research utilisation is not only on nurses. However, in America, the community focused national organisations developed procedures to increase community participation in research by expanding the community health workers' role in research.

2.4.2 Nursing research in the South African context

Studies conducted in South Africa in the nursing fraternity on the utilisation of research findings in practice are very scarce. According to the National Nursing Research Strategy Report, the prologue from the 'hero' in nursing education, highlighted that research has become a focus also for the nursing colleges (Uys 2011 cited in South Africa 2011:3). She indicated that many of them are planning to apply for registration as Higher Education Institutions (HEI). In addition, she also alluded that being a HEI usually includes a mission as well as a teaching mission as she felt that nursing colleges have not traditionally developed in the area of research and argued that this poses a new challenge (Uys 2011 cited in South Africa 2011:3).

In supporting the researcher's statement that research is scarce in the South African continent, a study conducted by Davis, Hendry, Barlow, Leonard, White and Coetzee

(2014:1) at the University of Cape Town state that evidence-based nursing require nurses to maintain an awareness of recently published research findings to integrate into practice. However, in the South African setting, keeping up with recent literature has additional challenges, including the diversity of nurses' home language, geographically foreign origins of published work and limited economic resources.

Davis et al (2014:1) encourage research utilisation since the aim of this study was to introduce journal clubs as an educational strategy to assist registered nurses entering a postgraduate programme with the challenges related to awareness, accessing and reading of current literature and appraising the application of research to local practice.

Another study conducted in a South African university by McInerney and Sulem (2013) found that evidence-based practice (EBP) requires that health care practitioners plan their actions based on clinically relevant studies and research as opposed to traditional actions that are steeped in opinion. Conversely, academic health care practitioners who are attempting to implement EBP have encountered a significant number of barriers in this South African institution. These barriers include lack of knowledge pertaining to EBP, lack of access to research findings, insufficient evidence, and insufficient time.

This again is supported by Swedlove and Etcheverry (2012:8) in which employment resources identified to support research included access to clinical specialists, service managers, mentors, groups, that is, clinical reasoning, research, journal clubs and special interest groups, technology, continuing education and the library (accessed online or in person).

All this is seen by the researcher as a trail to try and motivate even students in understanding the value and importance of research who will then in future be the professional nurses expected to utilise research findings in the clinical area because of the background research knowledge gained in the Nursing Education Institutions.

2.5 GENERAL BARRIERS TO NURSING RESEARCH

The researcher looked at the literature in utilisation of research findings and among other things. There are gaps that exist between the need to utilise research findings to inform clinical practice, and the source of knowledge utilised by nurses in providing care to their patients. Despite of mounting pressure to conduct research and utilise findings to improve patient care, gaps in utilising research findings were reported in various studies all over the world (Aboshaiqah et al 2014:1136).

In a survey among Chief Nurse Officers in 110 countries on why research findings were not utilised, it was found out that lack of reports and studies in one place, lack of cooperation within the organisation, and lack of awareness of research findings were perceived as the top barriers to research utilisation (Aboshaiqah et al 2014:1136).

The country will have developed and underdeveloped areas in which sometimes the utilisation of research findings can be a barrier. A study was conducted in a rural hospital in Nigeria, in which the majority of respondents were females, diploma holders and had four or more years of working experience. The major barriers identified by the respondents were issues with administration, lack of cooperation from physicians and lack of time among nurses to read research, insufficient time to implement changes and unwillingness to change or try new things (Chinomso & Foluso 2014:184; Breimaier et al 2011:1744). Other barriers included barriers such as lack of adequate resources among nurses, lack of financial support, staff shortage, poor communication and understanding of research findings and over dependence of nurses on physicians in making critical decision about patient (Chinomso & Foluso 2014:185).

Nurses' lack of authority to change patient care procedure and implement evidence-based change was rated as an important barrier to research utilisation (ranked sixth). This finding is supported by other studies (Chinomso & Foluso 2014:28). Due to medical dominance, practicing nurses have experienced a system where the majority of clinical decisions are imposed by doctors. This will have a negative effect on nurses' self-confidence and in turn minimise their ability to exercise authority or power in the practice setting or to function to the full scope of their practice as nurses (Tawfik, Mohamed & Moussa 2014:94).

A study was performed to determine the barriers to the implementation of nursing research findings, as perceived by the nurses working in Asser Region of Saudi Arabia. Seven hospitals were randomly selected using a cluster sampling technique, encompassing governmental and private hospitals (Alshloul, Abdullah & Albashtawy 2014:15). In this study, an extensive research was carried out to examine barriers to research use in nursing that prevent nurses from incorporating research findings into their practice (Alshloul et al 2014:16). Those barriers include not having enough time to read, evaluate and implement research findings, lack of support from the organisation and from other health care professionals as well as a lack of autonomy and authority to change practice, lack of knowledge of the research process and the skills to access, understand, critically evaluate and implement research findings, not being able to understand research reports and interpret research findings, shortages of colleagues with expertise to discuss research and the dependence of nurses on doctors and managers in making changes in clinical practice (Alshloul et al 2014:16).

In the study by McClung (2012:14), two barriers that have been identified as being the most problematic for implementing research in practice: (1) interpretation problems and (2) access or awareness problems (Dickson 1996 cited in McClung 2012:14). Interpretation problems concern the clinicians' ability to understand research articles. In contrast, access and awareness problems refer to the clinician's ability to access relevant research and their awareness of the existence of the research in the first place. These older nurses feel uncomfortable with the methods, analysis, and language used in nursing research and do not feel confident critiquing the information they are able to find. This barrier is present "in part ... because researchers tend to write for other researchers" (Funk, Tornquist & Champagne 1989:362 cited in McClung 2012: 5).

A small number of nurses had engaged in research through helping medical and nursing colleagues. The research methods exposed to nurses were either survey-based research or randomised controlled trials; knowledge of which more nurses had claimed. More nurses also claimed experience in the qualitative paradigm based on respondent observation and documentation based on text analysis and more of them indeed have knowledge of the two. When asked about data analyses, few claimed knowledge of both quantitative and qualitative methods. This suggested that nurses' research experience seldom went beyond data collection. Evidently, while many were involved with data collection, few were involved in data analysis. This finding is consistent with the

qualitative finding in which nurses felt that they were expected to have adequate knowledge to identify research questions. However, they were not exposed to opportunities to develop their skills to conduct research in order to follow through their research questions: “expected to have research ideas knowledge but no one briefs us how to conduct it, so can lose interest...no one explains how to do it”. Therefore, many nurses felt that research opportunities are confined to the medical professionals. As expressed by one respondent, it was common for doctors to do research because they had the resources and privilege (McClung 2012:15).

A study was conducted by Afolayan, Donald, Baldwin, Onasoga and Babafemi (2013:34), regarding the utilisation of nursing process in a Psychiatric Hospital whereby the utilisation of the nursing process and patient outcome at Neuro Psychiatric Hospital Rumuigbo was evaluated. Data were collected using a structured questionnaire of the Likert type, and analysis of findings was done using percentages and non-parametric statistics t-value. The findings from this study showed that although the trained nurses at the hospital had good theoretical knowledge of the nursing process. However, they did not apply it in the care of their patients. There were several challenges to the lack of application, including inadequate practical knowledge, inadequate staff, work overload, management's inability to provide the needed materials among others.

2.6 CONCEPTUAL FRAMEWORK

When research is done, the main objective of doing it is to build or generate a theory. Theory guides and generates ideas for research (Polit & Beck 2012:1450). This study will be shaped and guided by the collaborative model of knowledge translation between research and practice in clinical setting by Baumbusch, Kirkham, Khan, McDonald, Semeniuk, Tan and Anderson (2008:134). The model indicates the factors of knowledge translation as underpinned by an understanding that it is an interactive and a reciprocal process ‘a synthesis and ethically sound application of knowledge within the complex system of interactions among researchers and knowledge users’ as in line with the utilisation of research findings in practice: professional nurses’ perspectives.

The study objectives and the questionnaire will be shaped along the deliberations of this model in order to help the researcher to identify and determine the perceptive of the professional nurses in the utilisation of research findings. The researcher designed the

framework below, adopted and adapted from a collaborative model of knowledge translation between research and practice by Baumbusch, et al (2008:130).

The professional nurses, who according to the researcher are the tools in the implementation of research findings, will also benefit from the utilisation of research findings in practice, notwithstanding the role research findings will play for the patients. All of these sets of these mentioned individuals play a role in the process of improving patient's care and they are therefore the crucial elements in the utilisation of research findings. Without the presence of professional nurses and patients, there will be no organisations and interchangeably the organisation exists because there are patients under the care of professional nurses. It is then why the researcher in this study included the effects this utilisation of research findings would have for the patient, professional nurses as well as for the organisation.

A modified version of a Collaborative Model for Knowledge Translation between Research and Practice in Clinical Settings was adopted and adapted from Baumbusch et al (2008:132).

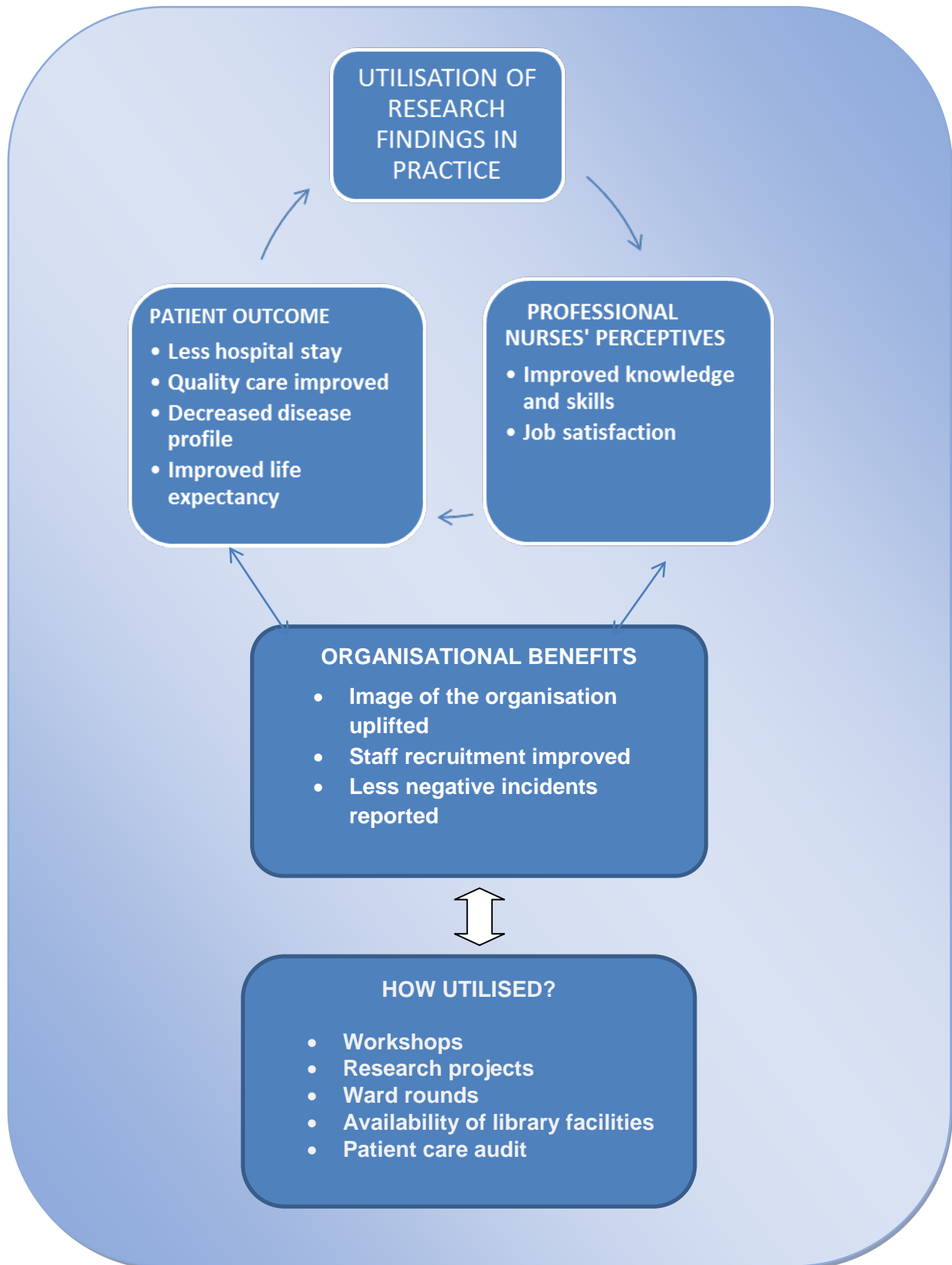


Figure 2.1 A modified version of a Collaborative Model for Knowledge Translation between Research and Practice in Clinical Settings

2.7 THE EFFECTS OF THE UTILISATION OF RESEARCH FINDINGS

2.7.1 The professional nurses

The impact that the nursing profession has on health care of the society depends on the competence of its practitioners and to achieve positive, cost-effective patient outcome. Furthermore, the application of research evidence to everyday practice may not only elevate the quality and standards of nursing care but also enhance personal and professional growth for nurses themselves (Chien, Bai, Wang, Wong & Lu 2013:97).

The researcher in using Baumbusch et al (2008:134) model of knowledge translation of utilisation of research findings in clinical setting was that the utilisation of research findings in nursing practice may be seen by the researcher to be conducive to learning and minimising the practice-theory breach, resulting in the practice of what is preached more generally. Apart from the knowledge, research creates its activity as one certain way to cultivate logical thinking and a critical thinking ability for the professional nurses.

2.7.1.1 Improved knowledge and skills

Evidence-based practice (EBP) is currently one of the most important underlying principles in modern health care. The knowledge generation in health care, for example, in nursing and medicine, is quite extensive, leading to a rapidly growing knowledge base (Florin, Ehrenberg, Wallin & Gustavsson 2012:889). However, the translation of knowledge into clinical practice is often hampered (Grimshaw et al 2004 cited in Florin et al 2012:889). EBP has the potential to increase the quality of care by standardising the care process. Registered nurses (RNs) constitute a large group of health professionals, which can be expected to substantially impact the care provided in health care organisations, and subsequently, then outcomes of care.

2.7.1.2 Job satisfaction

There are numerous factors that have an impact on nurses' satisfaction (Hu & Liu 2004 cited in AL-Dossary, Vail & Macfarlane 2012:425), which demonstrated that there is a relationship between level of education and job satisfaction. The researcher looked at

knowledge translation model by Baumbusch et al (2008:134), as means of empowering the professional nurses with knowledge and will again enable the professional nurses to be satisfied at work. Therefore, nurses' satisfaction with their jobs is an important key to better work performance and staff retention (Al-Dossary et al 2012:425). Therefore, professional nurses who are knowledgeable in research will then be kept abreast with evidence based care which in turn will better the lives of the patients, as they will be safe in the hands of these professional nurses.

Evidence indicates that workplace trust relationships encourage social interactions and cooperation among health workers, have impact on the intrinsic motivation of HWs and have consequences for retention, performance and quality of care (Okello & Gilson 2015:1). This trust relationship will then motivate staff to love their job. This activity will assist professional nurses to gain knowledge on the ways of rendering effective patient care.

2.7.2 Organisation

2.7.2.1 Image of the organisation uplifted

A study by the psychiatric nurses in a Neurology hospital in Nigeria whereby the importance of the utilisation of nursing process in an aim to improve patient care which ultimately will improve the image of the hospital was conducted. Effective utilisation of the nursing process brings about professionalism and accelerated patient outcome. It makes the nurse skilful in care and lubricates the wheel of nurse-patient contract. It is beneficial to the patient, profession, the hospital management and government through realisation of her health policies to the people. Therefore, its non-implementation especially in the psychiatric hospital can compound the burden of disease on relations; promote relapses and chronicity (Afolayan et al 2013:42).

2.7.2.2 Staff recruitment improved

Weiss, Yakusheva and Bobay (2011:16) indicate that there was a path of significant associations from RN staffing to patient-reported quality of discharge teaching, from quality of discharge teaching to patient-reported discharge readiness, and from discharge readiness. This is confirmed by Weiss et al (2011:17) that costs of improved

hospital RN staffing could be offset by costs avoided through averting post discharge utilization. However, there is no business case for increasing nurse staffing when the financial beneficiaries of reduced post discharge utilisation are the payer and patient (Needleman 2008 cited in Weiss et al 2011). Staffing management is both a hospital and unit-level function. Strategic decisions to increase nurse staffing and recruitment/retention efforts to sustain optimal staffing levels are hospital-level management actions and control strategies to avoid understaffing, are the role of unit-based managers (Weiss et al 2011:34).

Implementation of payment reforms such as gain-sharing, bundling of payments for hospital and post hospital care, and creation of structures accountable for continuum of care services will incentivise optimal staffing to improve discharge processes, and achieve desired patient outcomes and cost savings (Guterman & Drake 2010 cited in Weiss et al 2011).

2.7.2.3 Less negative incidents reported

Weiss et al (2011:3) assert that good staffing and education should be given to patients while still being hospitalised and the teaching given on discharge demonstrated promising results in terms of reductions in adverse outcomes, post-discharge in elderly patients and others at high risk for readmission.

2.7.2.4 Less budget constraints

In an organisation that utilises the research findings, the researcher with an in depth literature review established that fewer negative incidents are reported as the nurses are well informed of the current care approaches which are evidence-based and this therefore equips them with the necessary and current strategies of improved patient care. Management of within-unit variation in nurse staffing holds the potential to improve outcomes of patients' and costs of care (Weiss et al 2011:34). Furthermore, Weiss et al (2011) indicate that direct interaction and indirect coordination time for discharge processes approaching 1.5 hours per patient. Jack et al (2009) cited in Weiss (2011:34), differentiation of discharge processes requiring RN-level skill could support planning for adequate staffing to achieve critical patient outcomes.

Three recommendations for health care policy and practice emerge from the study findings namely:

- manage nurse staffing levels to achieve optimal patient outcomes
- Implement assessment of quality of discharge teaching and discharge readiness as standard pre-discharge practices
- align payment models to encourage nurse staffing levels supportive of post discharge outcomes (Weiss et al 2011:34)

These recommendations contribute to the arsenal of strategies addressing health care quality and cost reforms.

2.7.3 The patient

A study review conducted by Squires, Hutchinson, Boström, O'Rourke, Cobban and Estabrooks (2011:2) revealed that nurses' reported use of research is moderate to high and has remained relatively consistent over time until the early 2000s. However, this finding may paint an overly optimistic picture of the extent to which nurses use research in their practice given the methodological problems inherent in the majority of studies.

There is a clear need for the development of standard measures of research use and robust well-designed studies examining nurses' use of research and its impact on patient outcomes. The relatively unchanged self-reports of moderate-high research use by nurses is troubling given that over 40 years have elapsed since the first studies in this review were conducted. Moreover, the increasing emphasis in the past 15 years was on evidence-based practice. More troubling is the absence of studies in which attempts are made to assess the effects of varying levels of research use on patient outcomes. It is for this reason that the researcher wanted to determine the effects the utilisation of research findings would have for the patient (Squires et al 2011:3).

2.7.3.1 Less hospital stay

Current efforts to improve hospital discharge are focused on establishing evidence-based physician and health team practices using discharge transition models that include discharge advocates (Greenwald, Denham & Jack 2007; Jack et al 2009), transition coaches (Coleman et al 2008), advanced practice nurses (Naylor et al 1999), and community-based services (Grimmer, Moss & Falco 2004; Centre for Allied Health Evidence 2010 cited in Weiss et al 2011:3), to assist with care coordination, negotiating the complexities of the health system, and surveillance. Therefore, this supports the researcher's study which is on the utilisation of research findings as among the objectives it will improve patient outcome which again for the organisational benefits will lessen the stay of patients in hospital as to the use of research findings as it is evidence-based.

2.7.3.2 Quality care improved

In order to implement the best possible care in the clinical setting, it is the responsibility of each nurse to utilise up to date information in practice (Cronenwett 1995 cited in McClung 2012:6).

2.7.3.3 Decreased disease profile

The registered nurse's role in teaching aims at improving the patient's health thus reducing the number of diseases as there are diseases which are preventable and this depends on the solemn responsibility of the nurse in giving the relevant education to achieve this goal. In a study conducted by Weiss et al (2011:6), discharge teaching was defined as the composite of teaching occurring during the hospitalisation to prepare the patient and family for discharge. According to Weiss et al (2011), the Quality of Discharge Teaching Scale(QDTS) is a patient self-report measure that uses an 11-point (0 to10) scale format to record patients' perceptions about the quality of discharge teaching received from their nurses during the course of discharge preparation. For this study, it served as a measure of the nursing process of discharge teaching as received by the patient. Two "content" subscales of six paired items measure the amount of "content needed" and "content received" related to information about managing care at home after discharge.

The “delivery” subscale consists of 12 items measuring perceptions about the skill of nurses as educators (for example, listening, answering concern, consistence, timing, promoting confidence) in presenting discharge teaching to the patient and family. Furthermore, Weiss et al (2011:6) maintain that patients should be discharged after ensuring that health education had been given. Moreover, a survey is conducted to patients as a quality measure to confirm and rate the education obtained which again according to the researcher is the valuable instrument for measuring quality care which will ultimately decrease disease profile.

According to Weiss et al (2011:8), the scale included four dimensions of discharge readiness, namely; personal status: how the patient is feeling on the day of discharge; knowledge: how much the patient knows about discharge-related topics; perceived coping ability: how well the patient expects to be able to handle medical and non-medical demands at home; and expected support: the amount of emotional and tangible support the patient expects to have after discharge.

2.7.3.4 Improve life expectancy

The utilisation of research findings in practice is essential in improving life expectancy. This is supported by the study conducted by Reimers, Knapp and Reimer (2012:2), who state that physical inactivity represents a major independent risk factor for mortality accounting for up to 10% of all deaths in the European region. Hence, because a 40% lower mortality rate corresponds to an approximately 5 year higher life expectancy, one would expect an approximately 3.5 to 4.0 year higher life expectancy in physically active persons compared to that in inactive persons. Physical activity reduces many major mortality risk factors including arterial hypertension, diabetes mellitus type 2, dyslipidaemia, coronary heart disease, stroke, and cancer. Without the use of research findings, the life expectancy would not improve as Reimers et al (2012:2) saw a decline in mortality rate through knowing that physical activity cause a decline in mortality rate thereby improving life expectancy.

2.7.4 How utilised?

In order to ensure that research findings reach the intended audiences, it may be necessary to produce and deliver the research message in multiple and varied formats (Flynn & Quinn 2010:601). Nevertheless, there is no single way of dissemination, “no magic bullet,” that will successfully work for every research dissemination undertaking and intended audience (Freemantle & Watt 1994:135). If research findings are to be used in the nursing field and their use is to become standard, nurse researchers must continue to utilise the variety of approaches available to them and to continue to discover new ways to disseminate findings (Le May 1999; Dickson 1996 cited in Flynn & Quinn 2010:602). The researcher in the research objectives wanted to establish ways in which utilisation of research findings will be used to positively improve patient outcome.

2.7.4.1 Workshops

Of the methods used to disseminate the research findings, workshops is generally one of the trajectories which will enable the health professionals to utilise research findings.

How practitioners learn about research findings?

- Professional associations
- Seminars/workshops
- Email alerts
- Journal articles (Penrod 2013:11)

2.7.4.2 Research projects

The researcher when assisting third year students at the campus with their research projects looks at it as a valuable tool for guiding students as they come out with very good topics and as such this forms means of motivating the students to enquire more knowledge on research. In order for the students to get information, they are prompted and advised to search information and understand how these findings of their search can be utilised. The researcher through this study has realised that computerisation is simultaneously a mechanism of the information explosion. Already, computer systems enable health care professionals to access patient databases, research databases,

clinical guidelines, and care protocols. The internet has emerged as a formidable medium for information provision and exchange.

2.7.4.3 Ward rounds

The Royal College of Physicians, Royal College of Nursing (2012:4) states that nurses have a crucial role on ward rounds, not only sharing key information between the patient and the health care team, but also supporting patients in articulating their views and preferences. Absence of a nurse at the bedside has clear consequences for communications, ward-round efficiency and patient safety. The responsibility to set aside time for ward rounds should be a collective one for doctors, nurses, pharmacists and therapists (Royal College of Physicians, Royal College of Nursing 2012:4).

‘Having plenty of pre-ward round information to read really helped me prepare for the ward round. The pre-discharge ward round was very detailed, and I left hospital with a clear plan and the knowledge that I was in safe hands;’ a patient’s perspective (Royal College of Physicians, Royal College of Nursing 2012:9).

This confirms the importance of ward rounds as information on patient care is shared among the health care professionals and modifications with regards to patient care done in line with what the current measure of care is, as being researched.

2.7.4.4 Availability of library facilities

Libraries form a vital resource of information and if used properly can aid in finding useful information needed in practice for improving patient care. According to Thomson and Dowding (2009:49), cited in McClung (2012:2), one of the ways in which one can reduce uncertainty relating to the question one faces is to search for information for research evidence to help in making a decision. The same library search has assisted the researcher in finding literature for review towards the topic under discussion. Academic libraries commonly maintain institutional repositories, and emphasise their use to open up avenues for librarians to further assist nurses with their research and its dissemination (McClung 2012:2).

2.7.4.5 Patient care audit

Patient audit is defined by the Department of Health as the systematic critical analysis of clinical care, including the procedures used for diagnosis and treatment, the use of resources and the resulting outcome and quality of life for the patient (DoH “Working for Patients” 1989, cited in Dartford & Gravesham NHS Trust 2013:3).

Before you start an audit think:

- Do we know and agree on what the best practice is?
- Will we be able to make any changes, if we find we need to?
- Will the changes make a difference to patients? (Dartford & Gravesham NHS Trust 2013:3).

The researcher worked in the clinical area and again does students’ accompaniments. She observed that patient audit is done as a way of improving patient care so that necessary interventions could be implemented to resolve identified gaps. The objectives include improving patients’ experience and safety, and raising the standard of patient care.

2.8 CONCLUSION

This chapter presented a resume of the existing literature on the subject of the utilisation of research findings in practice. It is evident from the topic under discussions that very limited studies have been carried out on this subject and in South Africa particularly. It is also evident from the literature that the uptake of the utilisation of research findings among nurses is limited or low.

CHAPTER 3

RESEARCH DESIGN AND METHODS

3.1 INTRODUCTION

The research design and research methodology form the crucial step in any research process as it spells out the plan and all the processes undertaken to conduct the study by the researcher. The purpose of this quantitative study was to determine professional nurses' perspectives on the utilisation of research findings in practice in the two public hospitals in the uMgungundlovu District in the Province of KwaZulu-Natal. This chapter assesses the research methodology employed to that end. The study used the quantitative methodology with a descriptive purposive design. In this chapter, the descriptive purposive design, target population, sampling measures, pre-test and data collection methods with pilot study and data analysis procedures were discussed. The ethical considerations, validity and reliability and limitations of the study were further assessed.

3.2 METHODOLOGY

According to Polit and Beck (2012:733), research methodology refers to the steps, procedures and strategies for gathering and analysing data in a study. This definition is consistent with the definition given by Creswell (2012:233), who states that research methodology involves the form of data collection, analysis and interpretation that researchers propose for their studies.

The research questions for this study influenced the choice of the instrument used to collect data for this study. These questions which are:

- What are the professional nurses' perspectives on the utilisation of research findings?
- How can the utilisation of research findings be increased in the clinical nursing as perceived by the professional nurses?

- What are the research findings utilised in practice to positively influence patients' outcome?

3.3 SETTING

According to Polit and Beck (2012:49), the setting refers to the specific places where information is gathered. The study was carried out at the two Public hospitals in uMgungundlovu District at the province of KwaZulu-Natal.

3.4 RESEARCH DESIGN

Research design is a blueprint for conducting a study that maximises control over factors that could interfere with the validity of the findings (Burns & Grove 2010:218). According to Polit and Beck (2012:58), the research design is the overall plan for obtaining answers to the questions being studied and for handling some of the difficulties encountered during the research process. A quantitative, non-experimental, descriptive survey was undertaken to generate information on the perspectives of the professional nurses on the utilisation of the research findings in practice. The objectives identified for the study guided the researcher on the selection of the research design.

3.4.1 Quantitative design

Burns and Grove (2010:716) define quantitative research as a formal, objective, systematic study process, to describe and test relationships and to examine cause-and-effect interactions among variables. In addition, Polit and Beck (2012:739) state that quantitative research is the investigation of phenomena that lends itself to precise measurement and quantification, often involving a rigorous and controlled design. The information collected was in a quantified form. This study was quantitative as the data was collected in numerical form by the use of questionnaires.

The quantitative paradigm is based on positivism. Quantitative designs align with the positivist paradigm. The assumption behind this paradigm is that there is a real world driven by real natural causes (Polit & Beck 2012:13). The main concern of the quantitative paradigm is that measurement is reliable, valid and generalisable to the

larger target population. In this type of design, the researcher and the research respondents can remain independent and not influence one another.

Quantitative design according to Brink, Van der Walt and Van Rensburg (2012:11) has the following characteristics:

- Focuses on a relatively small number of concepts
- Begins with preconceived ideas about how the concepts are interrelated
- Uses structured procedures and formal instruments to collect information
- Collects information under conditions of control
- Emphasises objectivity in the collection and analysis of information
- Analyses numeric information through statistical procedures
- The investigator does not participate in the events under investigation – is most likely to collect data from a real distance
- Incorporates logistic, deductive reasoning (Brink et al 2012:11)

3.4.1.1 Descriptive design

In descriptive designs, descriptions of the variables are provided in order to answer the research question (Brink et al 2012:112). The purpose of descriptive research is to provide a picture of situations as they naturally happen and it may be used to develop theory, identify problems with current practice, justify current practice, make judgments, or determine what others in similar situations are doing (Burns & Grove 2010:237). This study consisted of a literature study followed by a structured questionnaire to professional nurses working at the two public hospitals which trains the comprehensive programme with the purpose of describing their perspectives in the utilisation of research findings in practice. Burns and Grove (2010:239), view that some descriptive studies use questionnaires (surveys) to describe an identified area of concern.

According to Brink et al (2006:109), survey studies are concerned with gathering information from a sample of the population by means of questionnaires, indirect observation and interviews. Simple surveys describe a phenomenon, where the researcher searches for accurate information about the characteristics of particular

subjects or situations. The variables of interests are classified as opinions, attitudes, or facts (LoBiondo-Wood & Haber 2010:198). But the researcher does not manipulate any variables or attempt to determine the relationship between variables. This study was a simple survey. The information was gathered from a sample of professional nurses by means of self-administered questionnaires. According to LoBiondo-Wood and Haber (2010:200), evidence gained from a survey may be coupled with clinical expertise and applied to a similar population to develop an educational programme to enhance knowledge and skills.

3.4.1.2 Non-experimental design

Polit and Beck (2012:735) state that non-experimental research is the study in which the researcher collects data without introducing an intervention, also called observational research. In addition, Polit and Beck (2012:223) state that most nursing studies are non-experimental, in large part because a vast number of human characteristics that is, birth weight, body temperature and ethnicity cannot be experimentally manipulated.

3.5 POPULATION AND SAMPLING METHODS

3.5.1 Population

A population is the entire set of individuals or objects having some common characteristics (Polit & Beck 2012:738). The population comprised all professional nurses working at two public hospitals that are providing clinical learning experience for students doing the comprehensive four year diploma course (R425 of February 1985) (N=525) and the sample size was (n=284) due to accessibility.

The entire contingent of professional nurses present on the day of data collection is asserted to be a representative sample. An all-inclusive sample was used to collect data and the sample was not separated into groups (Burns & Grove 2010:345). The criteria used for sampling are shown in the Table 3.1 below.

3.5.1.1 Criteria for inclusion and exclusion in the study

Table 3.1 The inclusion and exclusion criteria of the sample

THE INCLUSION CRITERIA	THE EXCLUSION CRITERIA
<ul style="list-style-type: none">• Professional nurses employed in two public hospitals	<ul style="list-style-type: none">• Professional nurses employed in Private hospitals
<ul style="list-style-type: none">• Age, gender, marital status, position held, race	<ul style="list-style-type: none">• Professional nurses over 65 years of age doing part-time job.
<ul style="list-style-type: none">• Professional nurses working in various wards/units	<ul style="list-style-type: none">• Enrolled nurses and enrolled nursing assistants

3.5.2 Sampling

Polit and Beck (2012:132) state that “sampling” is the process of selecting a portion of the population to represent the entire population so that inferences about the population can be made”. This statement was supported by Burns and Grove (2010:343), when they stated that sampling involves selecting a group of people, events, behaviours, or other elements with which to conduct a study. Having identified the population of professional nurses, the sample was decided upon by the researcher, namely; the professional nurses working at two public hospitals that are providing clinical learning experience for students doing the comprehensive four year diploma course (R425 of February 1985). According to Burns and Grove (2010:344), sampling is necessary as the entire population may not be accessible to the researcher for various reasons which could include refused entry permission by an authority, availability of funds a widely distributed geographical area. One hospital in the uMgungundlovu District was excluded as it is not a training institution.

3.5.2.1 Pilot study

Prior to data collection, a pre-test study was undertaken, testing 5 professional nurses who met the inclusion criteria and were not included in the main study sample to investigate the feasibility of the proposed study and to detect possible flaws in the methodology (Brink et al 2012:174). Pilot test of a questionnaire or interview survey is a procedure in which a researcher makes changes in an instrument based on feedback

from a small number of individuals who complete and evaluate the instrument (Creswell 2012:625). The reliability and validity of the questionnaires with regard to professional nurses were again tested with the pre-test study. After the pre-test study, respondents of the pre-test study were asked if the questionnaires were clear and easily understood. Any identified errors were rectified to facilitate understanding in the main study. There were not much changes made except that one of the respondents in the pre-test study asked clarity on the Regulation numbers of the South African Nursing Council programmes and the researcher had to give each regulation number the specific name; for example, R683 programme, next to it (Bridging course, R212 (post-basic course). These changes were then made to all the questionnaires in preparation for the main study so that no respondent/s in the main study could have the similar concern.

3.6 SAMPLING METHOD

A purposive non-probability sampling method was used by the researcher. This sampling method allows the researcher to deliberately select who to include in the study on the basis that those selected can provide the necessary data (LoBiondo-Wood & Haber 2010:228). Furthermore, Brink et al (2012:141) support this understanding by describing purposive sampling as the technique based on the judgement of the researcher regarding respondents that are typical or representative of the study or conversant about the question at hand. Purposive sampling allows the researcher to use his or her knowledge of the population and its elements to hand-pick the cases to be included in the sample (LoBiondo-Wood & Haber 2010:228). The researcher chose this method because of knowledge that the two hospitals were both the public institutions and they were both the training institutions of the comprehensive programme.

3.6.1 Sample size

The population size is N=284 after working out ten percent of the entire population from the two institutions wherein the study was conducted which made a population of N=525. The researcher distributed about 405 questionnaires. Two hundred questionnaires were distributed at one of the selected hospitals, one hundred and forty five questionnaires were completed and fifty five were returned uncompleted. The other two hundred and five questionnaires were distributed to another selected hospital. Out

of two hundred and five, one hundred and thirty nine questionnaires were completed and sixty six were returned uncompleted.

3.7 DATA COLLECTION

The data collection instrument was a self-administered questionnaire, which was based on an extensive literature research with regard to the perspectives of the professional nurses with regards to the utilisation of research findings in practice. Babbie (2007:246), cited in De Vos et al (2011:186), describes a questionnaire as “a document containing questions and or other types of items designed to solicit information appropriate for analysis”. On the same vein, Polit and Beck (2012:265) support this definition as they state that the questionnaire is a document used to gather self-report data via self-administration of questions. The questionnaire comprised both open-ended questions, closed-ended questions and a Likert scale and that gave respondents the opportunity to elaborate and state reasons for their responses. This method was chosen because respondents were dispersed in a wide geographical area around KwaZulu-Natal, and it would be easier to collect data using questionnaires. The format was standardised for all respondents and questionnaires are easier to test for reliability and validity.

A self-administered questionnaire was developed in accordance with the study objectives. The questions were set out in a sequence considered by the researcher to be appropriate and effective for achieving the study aims. Some of the questions used in the questionnaire were adapted from Heaslip et al (2012) and a permission letter was obtained after sending a request to adapt the questionnaire (Annexure E) (Permission to use the research questionnaire). The questionnaire comprises of open-ended, closed ended questions and a Likert scale (Annexure H). The questionnaire was pre-tested prior to being administered to ensure validity and reliability. Five professional nurses were invited for pre-testing of the questionnaire. Input was used as suggested by the respondents who were pre-testing the questionnaire.

The researcher had two meetings with the respondents from each hospital. The first meeting was to explain the research topic, purpose and objectives of the study and the signing of the consent form. The questionnaires were distributed to the respondents, together with an envelope in which respondents returned their questionnaires. The Operational Managers were requested to coordinate the distribution of the

questionnaires to the professional nurses in their various wards. The respondents were given two weeks to complete the questionnaire. It took approximately 20 minutes to complete the questionnaire.

The study focused on professional nurses at the two selected hospitals that were providing clinical learning experiences for students doing the four year comprehensive programme. The main study was done following the same parameters as the pre-test study. Data were collected during the months of February and April 2015. The researcher utilised the times agreed upon with the nursing managers of the selected hospitals. The two hospitals were visited on separate dates. Respondents completed the survey at their places of employment and were also asked to complete it during their tea breaks or lunch breaks so that service delivery was not compromised. Furthermore, respondents were gathered according to their nursing managers in a room on the scheduled date and time to distribute the questionnaires whereby the information to the respondents and the consent form were explained to the respondents as well as the questionnaires. Physical comfort of the respondents was ensured by proper ventilation of the room, sufficient chairs, sufficient lighting and avoiding distractions such as noise. The questionnaires were distributed amongst the respondents, who were then left to complete them for at least 45 minutes. Confidentiality was emphasised. Accordingly, respondents were given two weeks to complete the questionnaires, the researcher collected them and put them in the envelope and thanked the respondents. Pens to the amount of R1,67 cents to complete the questionnaire were provided to all the respondents as an incentive for participation in the study.

3.7.1 Design of the questionnaire

The questionnaire was divided into four sections, namely; Section A to D. Section A focused on demographic data and included questions such as age, educational qualification, gender, years of experience and employment details. Seven (7) questions were asked. This information served as background information because they could have an influence on the views and opinions of the respondents regarding their competencies in assisting students in the clinical area. Section B focused on the respondents' clinical experience and their preparedness for their role as professional nurses in the clinical area. Four (4) questions were asked in this section. Section C

focused on learning strategies which the professional nurses use for the various types of students under their supervision in the units/wards; for example, bridging course students, to effectively improve patients' outcome, four-year programme, and post basic courses. Eight (8) questions were asked in this section. Section D focused on how the professional nurses evaluate their effectiveness to the students under their supervision in the clinical area and more questions were based on utilisation of research findings and challenges thereof. Seventeen (17) questions were asked. Some of the questions asked the respondents to provide comments.

The questionnaire consisted of the following type of items:

Open-ended questions

According to Polit and Beck (2012:297), open-ended items are used when the researcher wants the subjects to respond in their own words in a narrative fashion. Therefore, the researcher does not know all of the possible alternative responses. The analysis of open-ended questions is time consuming and difficult and it is also more subjective. Respondents were also asked to describe their views on what makes learning motivating in their roles as professional nurses, (question 27 of the questionnaire). In addition, respondents were asked to state reason/s if any for any suggestions they may have on how managers who are not using research findings can be guided towards adopting this strategy (question 38).

Close-ended questions

According to Polit and Beck (2012:297), closed-ended questions offer respondents options, from which they must choose the one that most closely matches the appropriate answer. The alternatives may range from the simple yes or no variety to complex expressions of opinion or behaviour. Closed-ended questions are difficult to construct but more efficient than open-ended questions because respondents can complete more closed than open-ended questions in a given amount of time (Polit & Beck 2012:415). Respondents were asked if there was a tool available in their unit to assess learning of students, question (20), and question (25) asked if the ward has a tool used by nurse educators to evaluate teaching strategies.

Likert scale

The Likert scale determines the opinion or attitude of a subject and contains a number of declarative statements with a scale after each statement and is the most commonly used of all the scaling techniques (Burns & Grove 2010:410). Similarly, Polit and Beck (2012:732) concur that a Likert scale is a composite measure of attitudes involving the summation of scores on a set of items that respondents' rate for their degree of agreement or disagreement. Response choices in a Likert scale most commonly address agreement, evaluation or frequency. Agreement options include phrases such as strongly agree, disagree and strongly disagree. Likert scale questions were used for bridging programme graduates to rate their preparedness to perform management functions on entry into practice as a registered nurse and their socialisation into the role of the registered nurse. The Likert scale includes questions like whether there is a guide in the unit on the utilisation of research findings, question (31), if ward policies have directives for use of research findings, question (32), if it is necessary for to recommend the utilisation of research findings in practice, question (33) et cetera.

3.7.1.1 Advantages of a questionnaire

- Questionnaires are much less expensive to administer even if a researcher has a fixed amount of time and money, larger and more diverse sample can be obtained with questionnaires (LoBiondo-Wood & Haber 2010:277).
- Anonymity. Questionnaires offer the possibility of complete anonymity. A guarantee of anonymity can be crucial in obtaining candid responses, particularly if questions are sensitive (Polit & Beck 2012:305; LoBiondo-Wood & Haber 2010:277).
- Interviewer bias. The absence of an interviewer ensures that there will be no interviewer bias (Polit & Beck 2012:305).

3.7.1.2 Disadvantages of a questionnaire

- There is a possibility of low response rate and not getting many questionnaires back if not administered face-to-face.
- Questions cannot be explained to respondents and can be misinterpreted and answers cannot be put in any real world content.

- Questionnaires cannot tell or explain about the context and meaning behind a response (Polit & Beck 2012:188).

The respondents were left to complete the questionnaires on their own; the researcher could therefore not use any body gestures or probing which could influence respondents to change their responses. In addition, Polit and Beck (2012:345) state that the absence of the interviewer avoids biases reflecting respondents' reaction to the interviewer rather than to the questions themselves.

3.8 DATA ANALYSIS

Data were analysed using Statistical Package for the Social Sciences (SPSS) version 23 since this is a quantitative study. According to Brink et al (2012:179), statistical methods enable the researcher to reduce, summarise, organise, evaluate, manipulate, interpret and communicate quantitative data. Closed-ended questions were counted and frequency tables and percentages compiled. Responses to open-ended questions were read and analysed to detect the emerging of patterns. Collected data was analysed by making use of descriptive statistics. Procedures that allow researchers to describe and summarise data are known as descriptive statistics (Polit & Beck 2012:725).

3.8.1 Descriptive statistics

Numeric data was analysed using descriptive statistics. De Vos et al (2011:254) state that the simplest form of data analysis is univariate analysis, where all the data gathered on a variable is summarised for easy comprehension and utilisation. Therefore, this summary can take the form of tabular or graphic displays, or visual representation of the data. According to De Vos et al (2011:255, there are various graphic ways in which frequencies may be displayed. Frequency distributions were used to summarise and display the data collected. Bar graphs, pie charts and frequency tables were used to illustrate the data. Grouped frequency distributions were used for items placed in class intervals, such as the age of the respondents. Class frequencies were used to calculate by counting how many items fell into each category. Relative and cumulative frequency distributions involved calculating the data into percentages, in that, it indicates the proportion of the total number of cases that

were observed for a particular value. The researcher in some other questions in the questionnaire, required descriptions or asked for comments. The researcher then coded the responses by hand and compiled them into groups.

3.9 VALIDITY AND RELIABILITY

3.9.1 Validity

Validity is a more complex concept that broadly concerns the soundness of the study's evidence, whether the findings are unbiased, cogent and well grounded (Polit & Beck 2012:196). In this study, validity will enable to draw meaningful and useful inferences from the findings. The researcher will draw inferences on the results of the questionnaire whether the professional nurses' perspectives on the utilisation of research findings in practice will bring about any improvement and change in the quality of patient care given the effect of the independent variable on the dependent variable.

3.9.1.1 Face validity

Face validity refers to whether the instrument looks as though it is measuring the appropriate construct (Polit & Beck 2012:458). It is a rudimentary type of validity that basically verifies that the instrument gives the appearance of measuring the concept (LoBiondo-Wood & Haber 2010:289). For this study, the questionnaire appeared to have measured the professional nurses' perspectives on the utilisation of research findings in practice. In ensuring that face validity is ensured, the researcher designed a questionnaire in the English language which is understood by all the professional nurses in the two selected hospitals since it is the medium of instruction. Therefore, this made the respondents to participate as they understood the instrument.

3.9.1.2 Content validity

According to De Vos et al (2011:172), content validity is concerned with the representativeness or sampling adequacy of the content of an instrument. In addition, Burns and Grove (2005:377) further expanded on this, stating that content validity examines the extent to which the method of measurement includes all the major

elements relevant to the construct being measured. The questionnaire designed and used by the researcher in this study was based on an in-depth literature review. Corrections after the pre-test were made which were somehow not clear to understand by the respondents. The researcher first did the pre-test of the questionnaire and the questionnaire was also sent to the supervisor for scrutiny to confirm what Polit and Beck (2012:481), that an external review of the questionnaire by a panel of experts is essential to establish the scale's content validity.

3.9.2 Reliability

Polit and Beck (2012:175) define reliability as the consistency and accuracy of the information obtained. This is supported by Burns and Grove (2010:377), who asserted that reliability refers to the consistency of measures obtained in using a particular instrument. In this study, this criterion was used to design the questionnaire wherein questions were asked to establish how most, if not all professional nurses view the utilisation of research findings in practice. Moreover, the researcher analysed the findings to see if consistency of responses obtained various professional nurses exists. Furthermore, Creswell (2012:159) states that reliability is concerned with the consistency, stability and repeatability of informants' accounts, as well as the researcher's ability to collect and record information accurately. For this reason, the researcher used the same questionnaires to all the respondents and the conditions, under which the data were collected, where the same for all the respondents in the two selected hospitals to ensure consistency. The used questionnaire when used repeatedly as it was used in both hospitals to the same population, should provide the same result which proves consistency of the instrument (Terre Blanche, Durrheim & Painter 2011:152).

3.10 ETHICAL CONSIDERATIONS

After receiving approval of the study from the Department of Health Studies Ethical Board, University of South Africa (Annexure A) and the KwaZulu-Natal Department of Health Research Committee (Annexure D), permission was then sought with the Chief Executive Officers of the two selected hospitals (Annexure B).

Permission to conduct this study was obtained from the Nurse Managers via the Chief Executive Officers (Annexure C). Informed written consent (Annexure G) obtained from the respondents individually and nobody was coerced into participating in the research study because participation was voluntary (Annexure F).

Polit and Beck (2012:152) cited in the Belmont report, pronounced three primary ethical principles on which the standards of ethical conduct in research are based, that is, beneficence, respect for human dignity, and justice.

3.10.1 Beneficence

This is the one of the most fundamental ethical principle which imposes a duty on the researchers to minimise harm and to maximise benefits (Polit & Beck 2012:152). In this principle, the researcher is obliged to attempt to maximise the benefits that the research afforded to the respondents in the research study. This principle further covers the following rights:

3.10.1.1 The right to freedom from harm and discomfort

The researcher had an obligation to avoid, prevent or minimise harm (Polit & Beck 2012:152). However, the respondents in this study were not subjected to any physical injury except for the potential fear when they had to state if the research findings are not utilised which could somehow put them in fear that they are exposing the hospital or the nurse managers. However, confidentiality was ensured as there were no names to be written in the questionnaire. The same information was included in the respondent's information. The research itself was conducted in safe environments as it was done in the boardroom in each hospital.

3.10.1.2 The right to protection from exploitation

The researcher gave the respondents assurance that the information they provided, would not be used against them in any way. The benefits of the study were explained to the respondents, based on the objectives of the study; for example, that the findings will improve patient outcome.

3.10.2 Respect for human dignity

This is the second principle articulated in the Belmont report cited in Polit and Beck (2012:154), which holds that humans are capable of controlling their own activities and that they should be treated as autonomous agents who have the freedom to conduct their lives as they choose, without external controls (Burns & Grove 2010:189).

3.10.2.1 Right to self determination

This right depicts that prospective respondents have the right to decide voluntarily whether to participate in a study, without risking any penalty or prejudicial treatment (Polit & Beck 2012:154). The researcher informed all the respondents about the research study. People also have a right to withdraw from the study at any time, ask questions or refuse to give information. The researcher explained the aims and the objectives of the study to the respondents as well as their rights to withdraw from the study at any time (Polit & Beck 2012:154).

The researcher informed the respondents that they were not coerced in any way whatsoever to participate in this study and that there was no punishment or victimisation that would take place as a result of not participating in the study. Moreover, the researcher had encouraged participation by explaining the benefits of the study and asked the respondents to sign an informed consent form. The opportunity was offered to the respondents to ask questions related to the study conducted.

3.10.2.2 Right to full disclosure

According to Polit and Beck (2012:154), full disclosure means that the researcher has fully described the nature of the study, the person's right to refuse participation, the researcher's responsibilities, and likely risks and benefits. Respondents were also not deceived in any way as the researcher gave the relevant explanation before given the consent form after the whole respondent's information was explained; the consent form consisted of the topic of the study, the purpose, objectives, benefits of the study was presented to the respondents and was explained before they could sign the declaration section of the form. This was a strategy by the researcher to ensure that respondents had made an informed, voluntary decision about participating in the study.

3.10.3 Justice

The principle of justice includes respondents' right to fair treatment and their right to privacy (Polit & Beck 2012:155).

3.10.3.1 The right to fair treatment

The selection of study respondents was based on the study requirements as the selection criteria was all professional nurses in the two selected hospitals. The environment wherein the questionnaires were distributed was also conducive, fulfilling this ethical principle. Again, fair treatment was ensured by the researcher as the respondents were not forced to participate in the study. Most importantly, respondents were also not rushed to complete the questionnaire as ample time was given to the respondents to ask questions of concerns regarding the study purpose and objectives.

3.10.3.2 The right to privacy

Researchers should ensure that their research is not more intrusive than it needs to be and that the respondent's privacy is maintained throughout the study (Polit & Beck 2012:156). The researcher maintained privacy throughout the study as no names of the respondents were written in the questionnaires. The researcher kept the completed questionnaires under lock and key. Data collected was within the scope of this research, and no unnecessary questions were included in the questionnaire. Respondents had the right to be assured that any data they provided will be kept in strictest confidence (Polit & Beck 2012:156).

3.11 CONCLUSION

This chapter described the research methods and the rationale for their use, research design, population and sampling methods, data collection, data analysis and ethical considerations.

CHAPTER 4

STATEMENT OF FINDINGS, INTERPRETATION AND DISCUSSION OF THE PRIMARY DATA

4.1 INTRODUCTION

This chapter presents the results and discusses the findings obtained from the questionnaires in this study. The data collected from the responses were analysed with SPSS version 23.0. The results will present the descriptive statistics in the form of graphs, cross tabulations and other figures for the quantitative data that was collected.

4.1.1 The sample

In total, 405 questionnaires were despatched and 284 were returned, which gave a 70% response rate.

4.1.2 The research instrument

The research instrument consisted of 159 items, with a level of measurement at a nominal or an ordinal level. The questionnaire was divided into 4 sections which measured various themes as illustrated below:

Section A: Biographical characteristics of respondents

Section B: Clinical experience

Section C: Teaching strategies used in various wards by respondents

Section D: Evaluation of teaching strategies and questions related to the research objectives

4.2 SECTION A: BIOGRAPHICAL CHARACTERISTICS OF RESPONDENTS

This section summarises the biographical characteristics of the respondents.

Table 4.1 Biographical characteristics of the respondents (N=284)

Biographical characteristics of respondents			Gender		Total
			Male	Female	
Age	24 – 30	Count	15	61	76
		% within Age	19.7%	80.3%	100.0%
		% within Gender	32.6%	25.7%	26.9%
		% of Total	5.3%	21.6%	26.9%
	31 – 40	Count	15	100	115
		% within Age	13.0%	87.0%	100.0%
		% within Gender	32.6%	42.2%	40.6%
		% of Total	5.3%	35.3%	40.6%
	41 – 50	Count	9	57	66
		% within Age	13.6%	86.4%	100.0%
		% within Gender	19.6%	24.1%	23.3%
		% of Total	3.2%	20.1%	23.3%
	51 – 60	Count	7	18	24
		% within Age	25.0%	75.0%	100.0%
		% within Gender	13.0%	7.6%	8.5%
		% of Total	2.1%	6.4%	8.5%
	61 – 65	Count	1	1	2
		% within Age	50.0%	50.0%	100.0%
		% within Gender	2.2%	0.4%	0.7%
		% of Total	0.4%	0.4%	0.7%
Total		Count	47	237	284
		% within Age	16.3%	83.7%	100.0%
		% within Gender	100.0%	100.0%	100.0%
		% of Total	16.3%	83.7%	100.0%

Overall, the table above reflects that the majority of respondents were females; the ratio of males to females is approximately 1:6 (16.3%: 83.7%). This confirms that the nursing profession is female dominated.

Within the age category of 31 to 40 years, 247 (87%) were female. Within the category of females (only), 120 (42.2%) were between the ages of 31 to 40 years. This category of females between the ages of 31 to 40 years formed 100 (35.3%) of the total sample.

Age, educational level, job experience, and employment status were associated with organisational barriers to implementation of EBP (Khammarnia, Mohammadi, Zahra, Rezaeian, Setoodehzadeh, Kyalo, KagureKarani & Kigonde 2014:2). The respondents were asked to indicate their age to enable the researcher to determine whether a link exists between age and preparedness to utilise research findings in practice, or whether a greater number of barriers to continuing use of evidence base knowledge exist in a specific age category.

In Table 4.2, the age group shows that 31-40 years was the largest group of professional nurses which represented 115 (40.6%) in this study. The age group older than 61-65 years had the lowest number of respondents 2 (0.7. %). Nevertheless, it is not easy to establish the relationship between age and productivity for a variety of reasons, namely; productivity is a complex phenomenon; the age-productivity profile changes over time; is potentially endogenous and individual profiles are not easily aggregated (Garibaldi et al 2010 cited in Van Ours & Stoeldraijer 2011:4). A further complication in assessing the importance of the age effect on productivity is calendar time changes in the age-productivity profile. This is due to changes in the demand for skills as well as changes in individual characteristics across generations. Van Ours and Stoeldraijer (2011:4) further stated that new technologies and new working techniques imply a decreased need for manual labour and an increase in the demand for high skilled workers.

Physical strength and bodily coordination have become less important in the workplace, while cognitive abilities are increasingly important. However, physical strength and health are reduced as workers grow older (Van Ours & Stoeldraijer 2011:5). The researcher for this study can draw inferences that the older the respondent versus research utilisation, the greater is the challenge because of advancement in new technologies.

4.2.1 The racial composition of the sample

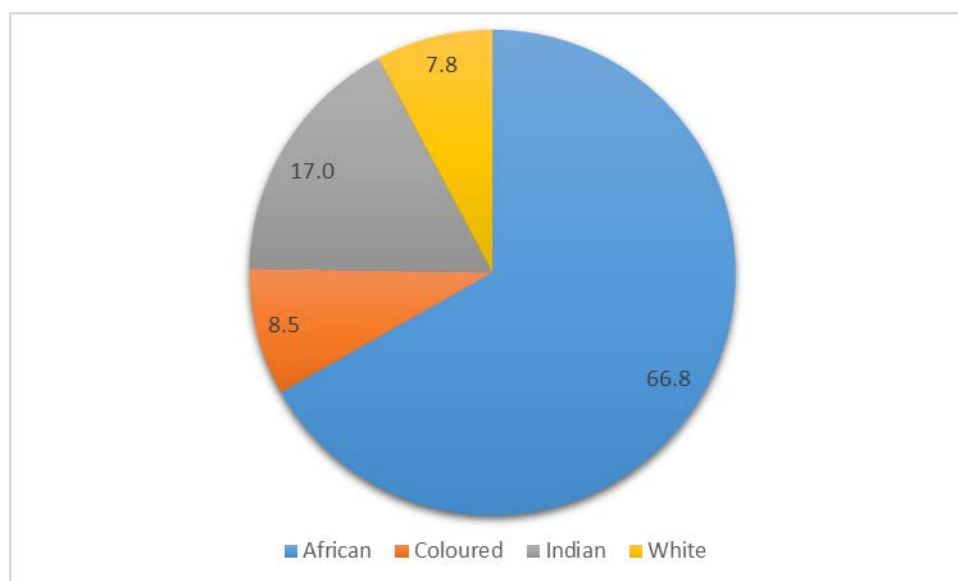


Figure 4.1 The racial composition of the sample (N=284)

Approximately two-thirds 195 (66.8%) of the respondent were African.

The study revealed that the black African nurses are the majority racial group, and this could be attributed to the fact that the black African population is the majority in KZN, and nationally (Statistics South Africa 2014).

4.2.2 Education levels of respondents

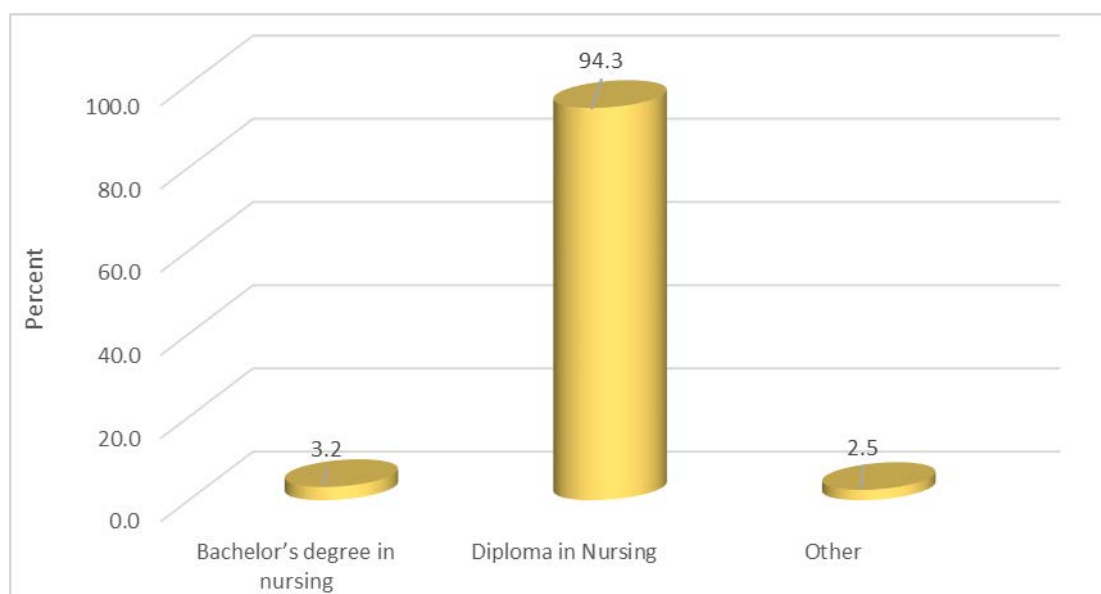


Figure 4.2 The educational levels of the respondents (N=284)

The majority of respondents 268 (94.3%) have a Diploma in general nursing qualification.

This is a useful statistic as it indicates that a fair proportion of the respondents have a higher and adequate qualification. The reason for the highest percentage of nurses in possession of diploma in general nursing is that, the professional nurses even before the implementation of the comprehensive four-year programme (R425) in 1986 still did the SANC three-year diploma in nursing. This indicates that the responses gathered would imply that responses would have been from an informed (learned) source.

In addition, most of the respondents had a post basic qualification.

4.2.3 The post-basic qualifications of respondents

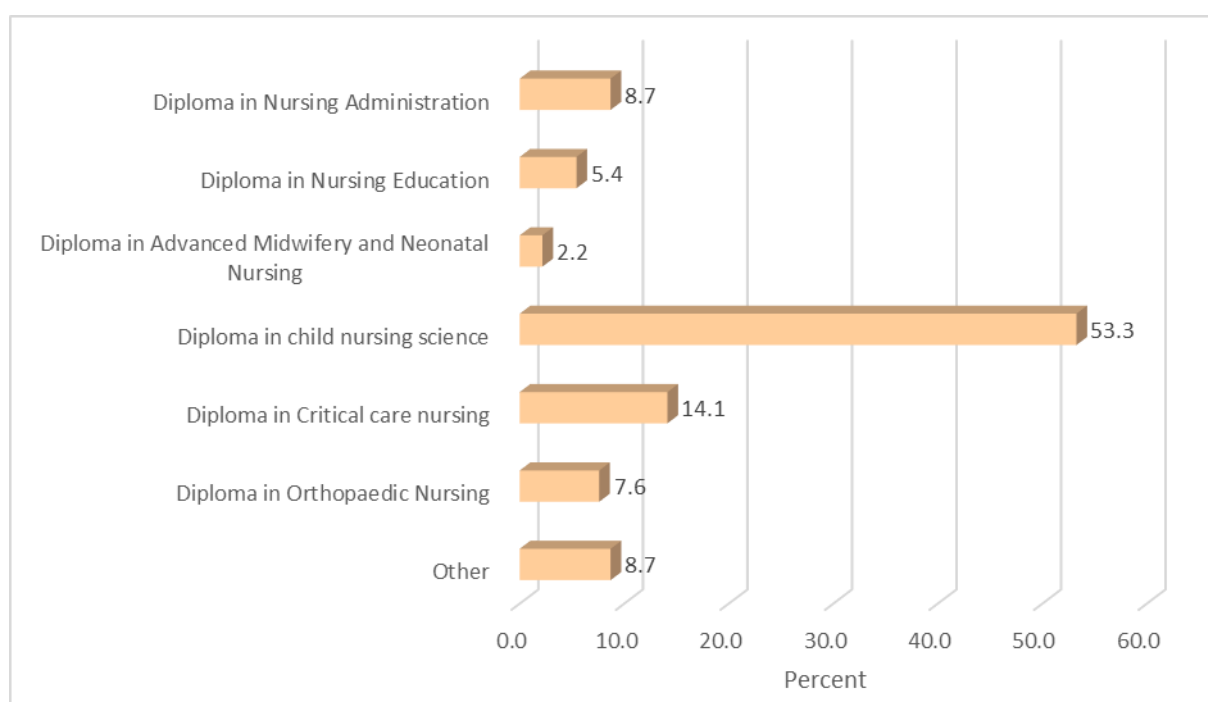


Figure 4.3 The post-basic qualifications of respondents (N=284)

More than half of the respondents 151 (53.3%) had a Diploma in Child Nursing Science. Diploma in Critical Care Nursing had 40 (14.1%) respondents followed by 25 (8.7%) respondents with Diploma in Nursing Administration. These figures are high since in the institutions under study, the paediatric wards would have more than two sections,

namely; medical surgical, high care and paediatric intensive care units and most respondents had a paediatric speciality.

4.2.4 Year in which qualification obtained

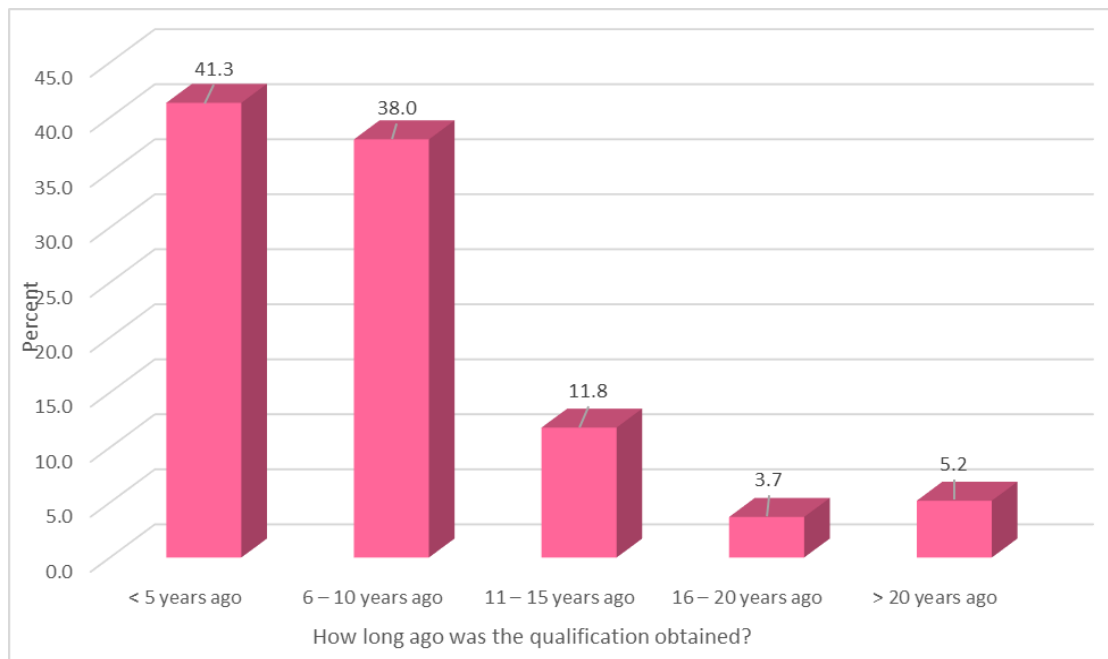


Figure 4.4 Year in which qualification obtained (N=284)

The respondents were asked to indicate how long they had been qualified as a registered nurse. The researcher used the measures of central tendency, the mean, median and mode, and applied them to the number of years the respondents in the study had been qualified. The purpose of using measures of central tendency is to summarise the information about one variable. The mean is the arithmetical average of all the scores in the distribution (Brink et al 2012:185). The number of nurses in the study was N=284. The mean was 13.2.

The median is the midpoint score or value in a group of data ranked from lowest to highest. The number of years a nurse was qualified ranged from 5 to 20 years, with the median being 11-15 years. The mode is the value or score that occurs most frequently in a distribution (Brink et al 2012:185). The most frequently occurring number of years a nurse in the study was qualified was 5 years (41.3%).

The mean number of years that the registered nurses had been qualified was 13.2. This indicates that the registered nurses in this research were experienced nurses who, in order to maintain relevance in their practice, should have been exposed to research during the nursing training. Most of the qualifications (79.3%) were obtained in the last 10 years.

4.2.5 Positions of the respondents

Table 4.2 Positions of the respondents (N=284)

Positions of respondents	Frequency	Percent
Operational Manager	20	7.0
Nurse Manager	13	5.0
Professional Nurse	251	88.0
Total	284	100.0

The table above reflects that the majority of respondents 251 (88.3%) are professional nurses, 20 (7%) are operational managers and 13 (5%) are nurse managers. The high percentage of professional nurses was that the professional nurses occupy a larger scale in the wards as opposed to operational nurses because they are in charge of the wards/units and each ward would have one operational manager. It is pleasant to note that the professional nurses are in majority as they are directly responsible for patient care and are highly skilled, knowledgeable, in terms of research, teaching administration as in accordance with the Scope of Practice (SANC R2598). Nurse managers are the overseer of the wards and one nurse manager would be supervising more than one wards/units.

4.3 SECTION B: CLINICAL EXPERIENCE

This section deals with clinical experience of the respondents in nursing.

4.3.1 Clinical experience of respondents

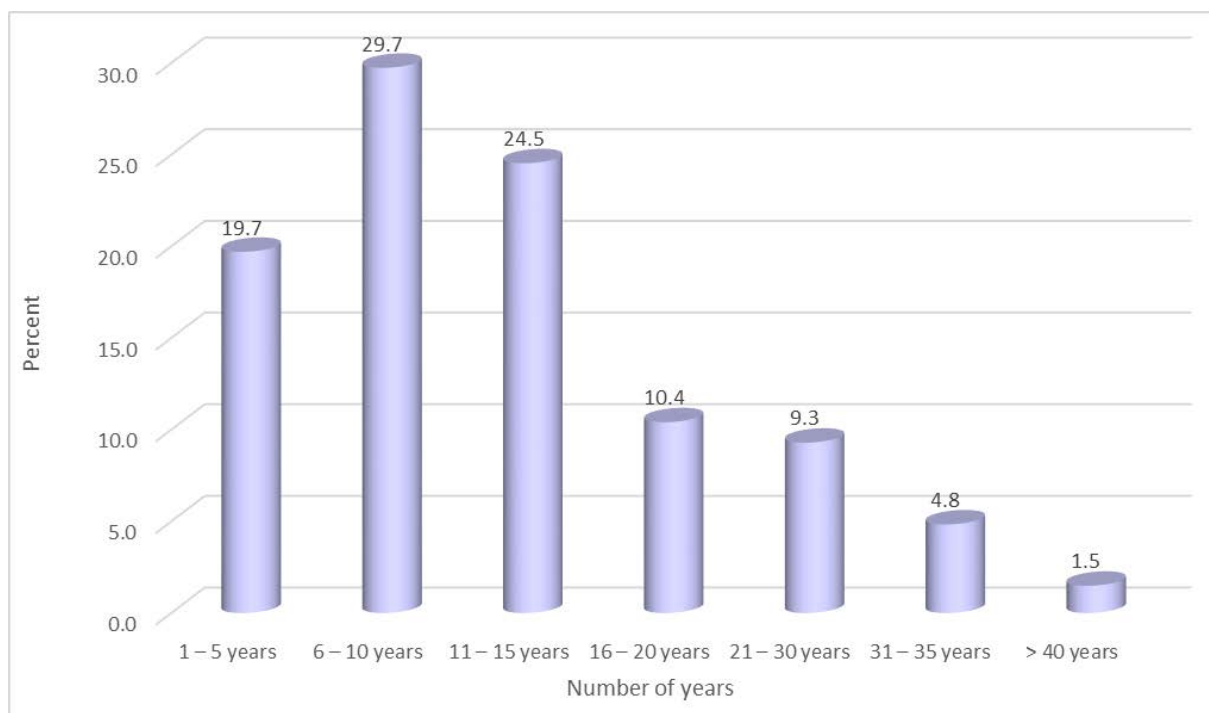


Figure 4.5 Clinical experience of respondents (N=284)

More than 227 (80%) of the respondents were nurses for at least six years. This shows a high level of experience which implies that responses for the questionnaire were from experienced members of the profession and that responses would be from a point of view of a fair level of experience. There were a relatively high number of years which had elapsed of clinical experience, since 84 (29.7%) of the respondents had above 10 years clinical experience which for this study may be indicative of professional nurses who are capable of rendering good quality patient care.

4.3.2 Wards/clinical areas where the respondents are working

Table 4.3 Outline of the wards/clinical areas where respondents are working (N=284)

Outline of the wards/clinical areas	Count	Percent
Medical	85	29.9
Paediatric	72	25.4
Surgical	59	20.8
Critical care	26	9.2
Out patient	25	8.8
Renal Unit	19	6.7
Maternity	16	5.6
Oncology	14	4.9
Orthopaedics	11	3.9
Trauma and emergency/Casualty	9	3.2
Operating Theatre	5	1.8
Gynaecological ward	4	1.4
Other	27	9.5

The three most common wards were medical (29.9%), paediatric (25.4%) and surgical (20.8%) as these wards are mostly full and have more staff allocated to them. Most research that is done in the college and in the wards revolves around medical conditions and these nurses should be having a pool of research done. The most frequently research topics done by students for the research projects are absenteeism (35%) and hand washing (65%). Hand washing should be researched with an aim of minimising cross infection and nosocomial infection for patients.

4.3.3 Nursing methodology

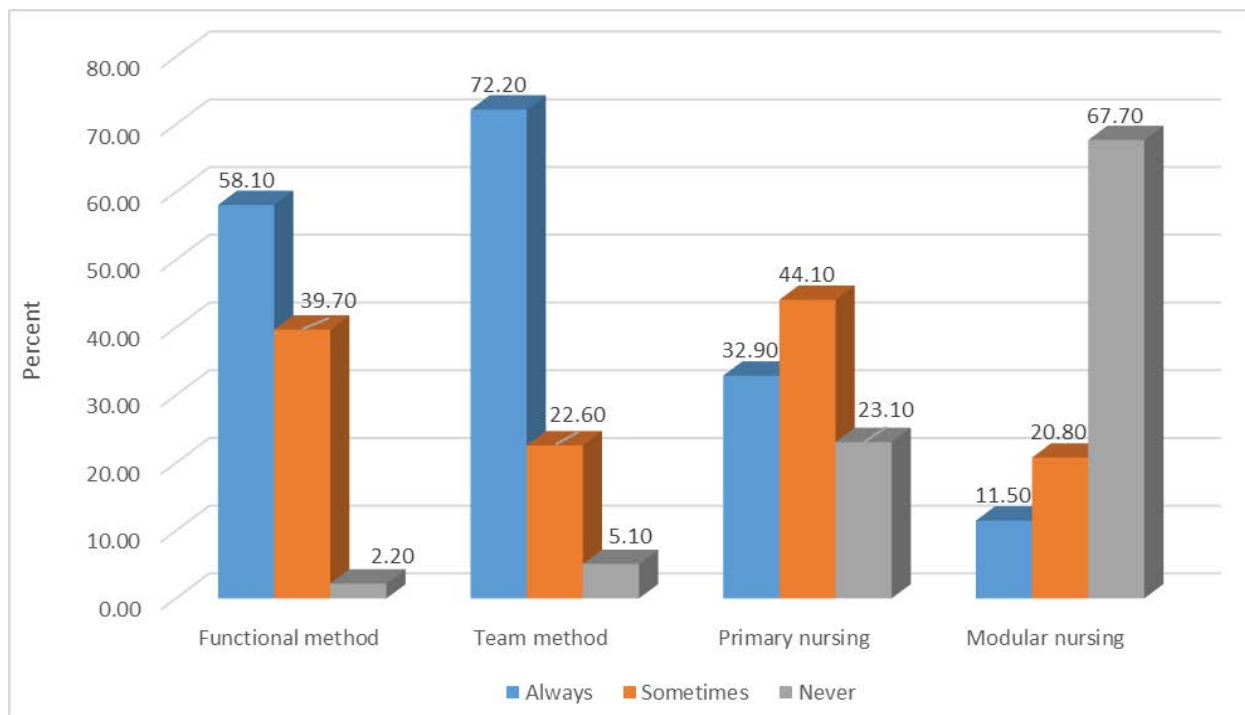


Figure 4.6 Nursing methodology (N=284)

The following patterns are observed:

Results on methods revealed that team work 204 (72%) was the method of choice that is commonly utilised by registered nurses in their units. Team method was also favoured by some respondents especially those working in critical care which presumably could be that the staff works in small groups and the registered nurse functions as a team leader, planning patient care, directing and assisting the team members to carry out patient activities.

In this study, the nursing care methods were meant to enable the researcher to establish the feasibility of utilisation of evidence-based care in the units or the routine nursing care is implemented without research evidence.

Most respondents use the functional and team methods of patient care. The assumption by the researcher with this nursing care modality being used most often is that more staff members are assigned to complete certain tasks and this is quite possible where there is staff shortage since one nurse will perform all the task to all patients; for

example, all injections for that ward, will be given by one registered nurse on that particular day/shift while another nurse, for example, do baths to all patients needing bed bath.

4.3.4 Categories of nursing students under the supervision by respondents

Table 4.4 Categories of nursing students under the supervision by respondents (N=284)

Categories of nursing students under the supervision of respondents	Count	Table Total N %
R425 (four-year programme) – Third	179	63.0
R425 (four-year programme) – Fourth	117	41.2
R683 (Bridging course) – Second	132	46.5
R254 (four-year Midwifery)	14	4.9
R212 (Post-basic course)	3	1.1
OTHER	7	2.5

An overwhelming majority 199 (70%) of respondents supervise the R425 (four-year programme) in second year followed by 185 (65%) respondents who supervise the first year students of the R425 (four-year) programme and 179 (63%) of students supervised in third year level of training.

The reason for such results is that, the R425 programme is mainly allocated in the general wards up to third year level of training and students in the last two modules of the four-year programme do midwifery and Psychiatric Nursing which is why again the respondents for the Bridging course students are relatively higher for the same reason that they are allocated to the general wards in their training. These figures relate to the fact that the research project is done at college by the third year students doing the R425 programme and the students doing the bridging course programme also do the introduction to research in second year level of training. The lowest level of post basic students (R212) occupies the lowest percentage. Most respondents in the two institutions under study work in non-specialised ward.

4.4 SECTION C: TEACHING STRATEGIES USED IN VARIOUS WARDS BY RESPONDENTS

4.4.1 Teaching strategies

4.4.1.1 The teaching strategies used to teach R425 learners

Table 4.5 The teaching strategies used to teach R425 learners

The teaching strategies	Always		Sometimes		Never	
	Count	Row N %	Count	Row N %	Count	Row N %
Lecture method	109	54.8	79	39.7	11	5.5
Small group discussions	93	55.0	73	43.2	3	1.8
Problem-based learning	61	40.1	73	48.0	18	11.8
Case-based studies	64	39.0	65	39.6	35	21.3
Questioning	122	69.3	49	27.8	5	2.8
Reflective thinking/Journals	32	21.3	55	36.7	63	42.0
Outcome based	68	43.6	52	33.3	36	23.1
Demonstration	109	72.2	34	22.5	8	5.3
Workbooks	110	74.3	33	22.3	5	3.4
Nursing rounds	145	84.3	27	15.7	0	0.0
Ward rounds	165	92.7	13	7.3	0	0.0
Evidence-based	29	15.3	44	23.2	117	61.6

Although statistical evidence supports all teaching strategies employed, the majority of professional nurses 175 (61.6%) have never utilised evidence-based learning. Therefore, this evidence supports the researcher's problem statement.

This section looks at the teaching strategies used by the respondents in the units/departments where they are working. For example, the last three options deal with nursing and ward rounds. It is understandable that these would be done very frequently as part of the job description. Furthermore, research use for 'always' measured 91 (13.9%) and use of 'evidence based' measured 42 (14.8%) and 150 (52.8%) for 'never'. These low figures in relation to 250 (88.1%) of nursing rounds are extremely low which according to the researcher proves that there is still a gap in the utilisation of research findings by the professional nurse in the institutions under study. This is supported by the study conducted in the United States and the Netherlands which indicated that 30–40% of patients do not receive care in line with the latest research and that 20–25% of

the care provided is inadequate and in some cases even dangerous (Bohman et al (2012:525).

Data used from the United States of America and the Netherlands, Grol and Grimshaw (2003), cited in Llasus (2011:30), reported that 30-40% of all patients do not receive health care based on current relevant knowledge and as much as 20-25% of all patients receive harmful or unnecessary care. In supporting this view, Bakken and Jones (2006) suggest that it is essential that new knowledge be translated and incorporated into clinical practice to improve health care (Llasus 2011:30).

4.4.1.2 The teaching strategies used in teaching R683 programme

Table 4.6 The teaching strategies used in teaching R683 programme

The teaching strategies used in teaching R683 programme	Always		Sometimes		Never	
	Count	Row N %	Count	Row N %	Count	Row N %
Lecture method	100	69.9	39	27.3	4	2.8
Small group discussions	65	58.6	43	38.7	3	2.7
Problem based learning	65	51.6	57	45.2	4	3.2
Case based studies	61	47.7	60	46.9	7	5.5
Questioning	68	60.2	42	37.2	3	2.7
Reflective thinking/Journals	23	20.2	34	29.8	57	50.0
Outcome based	44	42.3	53	51.0	7	6.7
Demonstration	107	75.4	32	22.5	3	2.1
Workbooks	84	67.7	39	31.5	1	0.8
Nursing Rounds	108	80.0	22	16.3	5	3.7
Ward Rounds	126	90.6	10	7.2	3	2.2
Evidence based	24	20.3	50	42.4	44	37.3
Projects	30	25.4	48	40.7	40	33.9
Teachable moments	92	67.2	42	30.7	3	2.2

Among all groups of learners, evidence-based learning is not employed as indicated by professional nurses as a teaching strategy. The table above portrays that 58 (20.3%) is shown under 'always'. It is disappointing to note that research is not employed even to the Bridging course students who after qualifying will be registered as general nurses and expected to be conversant with the advancement in the nursing fraternity and be the change agents. The bridging course students (R683) are taught introduction to

research in the second year of study. The researcher views this as means of empowering nurses with increased knowledge in order to facilitate improvement in health care delivery that is evidence-based.

4.4.1.3 Teaching strategies used to teach post-basic programmes (R212)

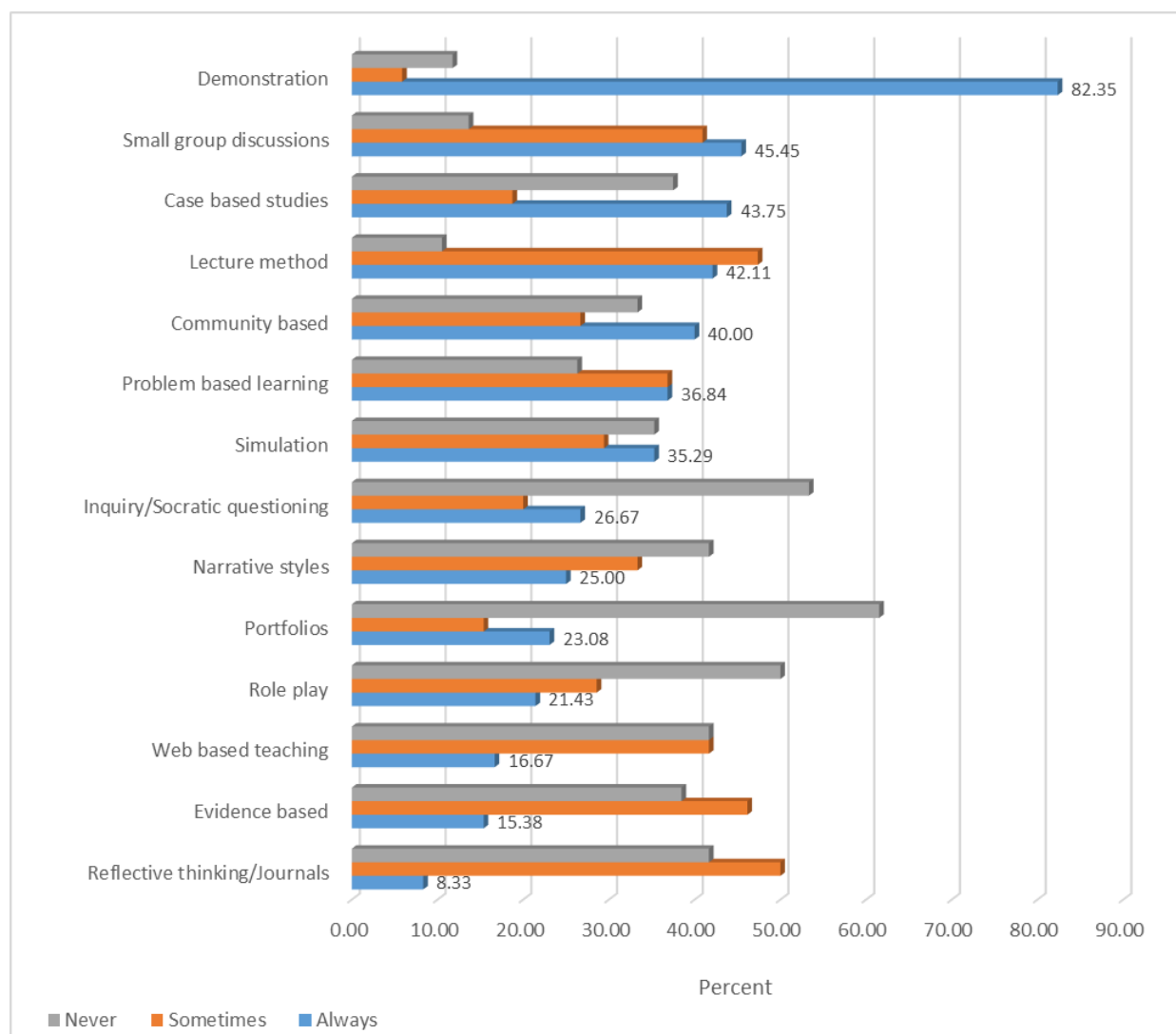


Figure 4.7 Teaching strategies used to teach post basic programmes (R212)

The figures indicate that very little is done by professional nurses in terms of utilising reflective thinking which is, 24 (8.83%) followed by evidence-based 44 (15.38%) and web-based teaching which is 47 (16.67%). However, these teaching strategies are of paramount importance in the post basic course. In Singapore, research modules are being taught to nursing students during their course of study in polytechnics and universities at both undergraduate and postgraduate levels. After graduation, nurses are to utilise research findings and are encouraged to conduct research to evaluate and

improve patient care outcome (Ang, Kwan, Aloweni, Aw, Tee, Tan, Chua & Tay 2015:73).

Conducting research in addition to working in the clinical area is challenging. Many studies have identified lack of time, high workload, limited knowledge and competence to read and use research findings, as well as the lack of organisation support as barriers to utilising and conducting research. The nursing profession needs to improve its professional status. In supporting the role of the post-basic nurse (Duma, Dippenaar, Oosthuizen, Middleton, Phillips, Naude & Uys 2012:5) emphasised the following criteria:

Criteria designating advance nurse/midwifery specialities

According to Duma et al (2012:5), the advanced nurse/midwifery specialist needs to:

- use advanced clinical assessment and decision-making
- function with a high degree of autonomy and independence
- manage a specified caseload
- implement a range of advanced clinical competencies
- integrate research, education and clinical management in practice
- provide consultancy to other health professionals
- be recognised as a first point of entry of service
- advocate for patient's rights and improved evidence-based quality of care
- develop best practice in a specialty field (evidence-based practice)
- participate in policy development for improved practice
- publish based on practice and practise research
- manage a business or project

4.4.1.4 The teaching strategies used to teach the R254 programme

Table 4.7 The teaching strategies used to teach the R254 programme

The teaching strategies used to teaching R254 programme	Always		Sometimes		Never	
	Count	Row N %	Count	Row N %	Count	Row N %
Lecture method	14	53.8	8	30.8	4	15.4
Small group discussions	18	64.3	8	28.6	2	7.1
Problem-based learning	14	70.0	4	20.0	2	10.0
Case-based studies	12	54.5	8	36.4	2	9.1
Demonstration	19	76.0	4	16.0	2	8.0
Simulation	12	46.2	12	46.2	2	7.7
Narrative styles	5	26.3	10	52.6	4	21.1
Inquiry/Socratic questioning	8	36.4	10	45.5	4	18.2
Portfolios	5	22.7	7	31.8	10	45.5
Reflective thinking/Journals	5	25.0	4	20.0	11	55.0
Web-based teaching	6	28.6	2	9.5	13	61.9
Evidence-based	9	40.9	5	22.7	8	36.4
Community-based	9	39.1	5	21.7	9	39.1

The figures of evidence-based are 103 (36.4%), which is a very high percentage of professional nurses doing training in midwifery and not utilising evidence-based when teaching the midwifery students. The midwifery students need to know more about research as they are already the practising professional nurses and their field deals with two lives, that of the mother and child. The focus on the upcoming new nursing qualifications in the new SANC curriculum is on mother and child.

The statistics on infant and maternal mortality rate reveal that there is 140 maternal mortality since 2010-2014. The overall 2013 infant mortality rate was 5, 96 infant deaths per 1,000 live births, nearly the same rate as the rate of 5, 98 in 2012 (Murphy, Jiaquan, Xu & Kochanek 2014:1). The graph remains static which confirms that there is no decline. It is disappointing to note that research is not the first priority to try and curb the high mortality rate.

4.5 SECTION D: EVALUATION OF TEACHING STRATEGIES AND QUESTIONS RELATED TO RESEARCH OBJECTIVES

4.5.1 Evaluation of teaching strategies and utilisation of research

This section deals with teaching strategies used in various units as in the questionnaire and utilisation of research findings according to the study objectives.

4.5.2 Respondents' evaluation of learners' competencies and effectiveness of teaching strategies

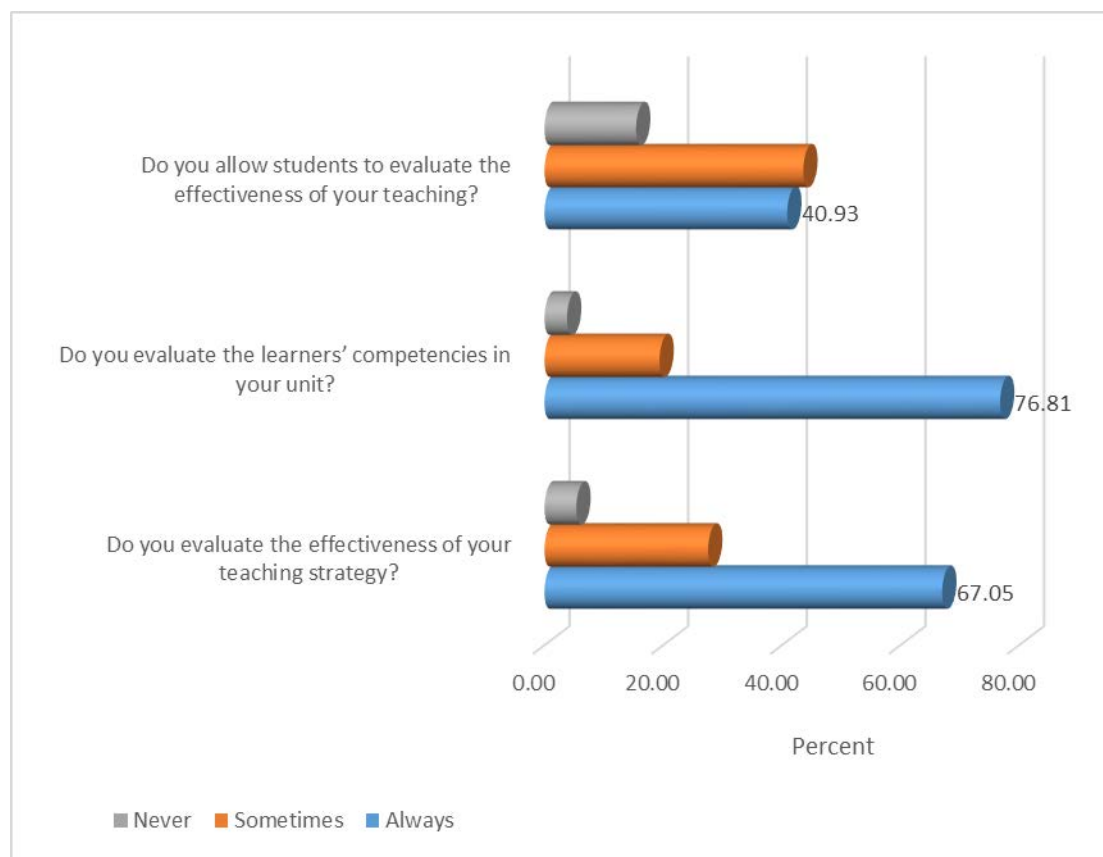


Figure 4.8 Respondents' evaluation of learners' competencies and effectiveness of teaching strategies (N=284)

More than two thirds of respondents evaluate learner's competencies and effectiveness of teaching strategies.

Approximately 116 (41%) allow students to evaluate their teaching.

4.5.3 How the respondents evaluate teaching strategies

Table 4.8 How the respondents evaluate teaching strategies (N=284)

How the respondents evaluate teaching strategies	Yes		No	
	Count	Row N %	Count	Row N %
Self-assessment	150	95.5	7	4.5
Student assessment	161	100.0	0	0.0
Peer reviews	108	100.0	0	0.0
Students' assessment results	100	100.0	0	0.0
Other	58	96.7	2	3.3

Very small numbers of respondents indicated that they are not evaluating the teaching strategies used. Most of the respondents evaluate their teaching method which is confirmed by 271 (95.5%) self-assessment. This is pleasing to note that the professional nurses understand the four-fold functions and that it cannot be teaching without evaluation. Contrary to this, the students are not given opportunity to evaluate the teaching done by the respondents in the clinical area which might have a negative impact in the respondents not being able to measure their competency and efficiency of their teaching.

The respondents who completed the questionnaires were N=284. Out of 284, only 75 (26%) respondents made use of the comments by responding to the open-ended questions.

4.5.4 The responses of some respondents on open-ended questions

Here are some of the highlights on what makes learning motivating by means of summary of the comments by the respondents:

The teacher has got to be motivated himself/herself and encouraging others:

- A variety of teaching methods
- Acquisition of new knowledge to practice evidence based care and quality care for patients

- Active participation and involvement in group discussions
- Availability of learning tools e.g. teaching aids
- Availability of library facilities, use of articles and information from newspaper
- Rewards and incentives
- Constructive criticism
- A very enthusiastic and energetic teacher
- Upgrading one's knowledge
- Good attitude of the teacher
- A relaxed learning environment for questioning without judgement

4.5.5 Challenges or barriers to the use of research findings

Table 4.9 Challenges or barriers to the use of research findings (N=284)

Challenges or barriers to the use of research findings	Count	Percent
Workload	232	81.69
Lack of knowledge of research	208	73.24
Time constraints	171	60.21
Lack of computer skills	145	51.06
Individual barriers	123	43.31
Limited support from the superiors	109	38.38
Lack of library facilities	108	38.03
Lack of in-service training on the use of teaching methodologies	107	37.68
Time taken to go to the library	97	34.15
Lack of interest of research	96	33.80
Learning styles of students	78	27.46
Other	44	15.49

Table 4.9 depicts that the highest identified barriers were workload 232 (81.69%). Several studies have found that both human and organisational factors are associated with barriers to the use of EBP, including lack of time to read literature, heavy workload, lack of staff experienced in EBP, and lack of resources (Khammarnia et al (2014:30).

Lack of knowledge of research 208 (73.24%) was also a challenge or the barrier on the utilisation of research findings by the respondents. This is supported by Athanasakis (2013:18) that measuring nurses' reading habits (frequency of reading journals, last time read a nursing journal, the name of the journal) as a factor of research habits had

been studied in several articles and it seems that nurses care about activities that upgrade both science and practice. Nevertheless, it seems that they have insufficient knowledge and not much time to dedicate research activities (Yava et al 2009 stated in Athanasakis 2013:180).

Time constraints portray 171 (60.21%). The results which show the high percentage in terms of time constraints and lack of knowledge as a barrier to the utilisation of research findings was confirmed by O'Lynn, Luparell, Winters, Shreffler-Grant, Lee and Hendrickx (2012:35), whereby insufficient time to access and evaluate evidence is a challenge. This barrier is further supported in a study by Khammarnia et al (2014:1), whereby time constraints were the barriers to the implementation of nursing research findings.

Seven hospitals in Asser Region of Saudi Arabia were randomly selected using a cluster sampling technique, encompassing governmental and private hospitals (Alshloul et al 2014:15). In this study, an extensive research was carried out to examine barriers to research use in nursing that prevent nurses from incorporating research findings into their practice (Alshloul et al 2014:16).

Lack of computer skills measured 145 (51.06%) of N=284 respondents. Although nurses are becoming more educated with a growing proportion holding nursing degrees, nursing literature remained underutilised (Blythe & Royle 1993 cited in Majid et al 2013:69). As a result, implementation of research findings into clinical practices is often delayed, and there remains a gap between what evidence is available and what is practiced. On average, it takes 17 years for clinical research to be fully integrated into everyday practice (Balas 2001 cited in Majid et al 2013:69). This is due to lack of access to relevant information sources, and inadequate information on literacy skills.

Nurses need to use the latest medical knowledge to support their health care practices as well as provide necessary information to patients and their families (Clarke & Aiken 2003 cited in Majid et al 2013:65). In addition to using traditional and well-established procedures and practices, health care practitioners are adopting innovative interventions that are based on best practices as well as solid research-based evidence (Majid et al 2013:65).

4.5.6 Methods of increasing research utilisation in clinical nursing

Table 4.10 Methods of increasing research utilisation in clinical nursing

Methods of increasing research utilisation in clinical nursing	Count	Total N %
Library facilities	186	65.5
Good staffing	199	70.1
Availability of nursing journals	167	58.8
Workshops	217	76.4
Availability of computers at the workplace	174	61.3
Involvements in research projects	143	50.4
Involvement in research ethics committee	130	45.8
Support from the superiors	163	57.4

The respondents were asked to select from the above-mentioned options aimed at improving research utilisation. As depicted in Table 4.10, 214 (75.4%) of the respondents stated that workshops are one of the important ways in which utilisation of research findings can be used to increase research utilisation in clinical nursing. According to Walugembe, Kiwanuka, Matovu, Rutebemberwa and Reichenbach (2015:1), the utilisation of research findings to inform policy and practice in Bangladesh found that the majority of researchers are engaged in a variety of activities to inform the utilisation process. This included holding dissemination workshops, publishing in scientific journals, developing policy briefs, providing technical assistance, and holding one-on-one meetings with service providers and programme implementers.

An overwhelming majority of respondents 202 (71%) selected good staffing as means of increasing research utilisation. This is confirmed by Hertel (2014:6) of research investigating whether or not patient quality has improved, since passage of California's Assembly Bill 394 is mixed. After the bill was implemented into practice, the Agency for Healthcare Research and Quality's (AHRQ) reported that its Patient Safety Indicators showed a significant reduction of patient falls, pressure ulcers, and restraint use.

Nearly two-thirds of respondents 185 (65%) selected availability of library facilities. Nurses need to possess basic skills for accessing relevant, accurate and current information to keep their knowledge up-to-date and hence adopt best medical practices

(Jones, Schilling & Pesut 2001 cited in Majid et al 2013:69). According to Majid et al (2013:69), nurses are becoming more educated with a growing proportion holding nursing degrees; however, nursing literature remained underutilised (Blythe & Royle 1993 cited in Majid et al 2013:69).

An overwhelming majority of respondents 206 (72.5%) of the respondents selected ward rounds as a way in which research findings can be used to positively increase patient care where management of patient is discussed including patient response to care and treatment. The respondents get time to enquire more about patient care from the members of the health team. In addition, 179 (63%) of respondents preferred patient care audit and 168 (59.5%) problem based care. Time given to do research projects is still rated low compared to these figures mentioned.

4.5.7 Methods that can positively increase quality patient care using research findings

Table 4.11 Methods that can positively increase quality patient care using research findings (N=284)

Methods that can positively increases quality patient care	Count	Total N %
Used on patients with a rare condition	160	56.3
Use of research projects	165	58.1
Problem based care	169	59.5
Case based care	152	53.5
Employment of masters' staff	68	23.9
Specialisation	153	53.9
Use of nursing journals	155	54.6
Time given to do research projects	139	48.9
Ward rounds	206	72.5
Patient care monthly audit	179	63.0
Other	16	5.6

Most importantly, 206 (72.5%) of the respondents selected ward rounds as a way in which research findings can be used to positively increase patient care as during ward rounds, management of patient is discussed including patient response to care and treatment. The respondents get time to enquire more about patient care from the members of the health team. Sixty-three percent, of the respondents preferred patient

care audit and 169 (59.5%) problem based care. Time given to do research projects is still rated low 139 (49%) compared to these figures mentioned.

4.5.8 A guide on the utilisation of research findings

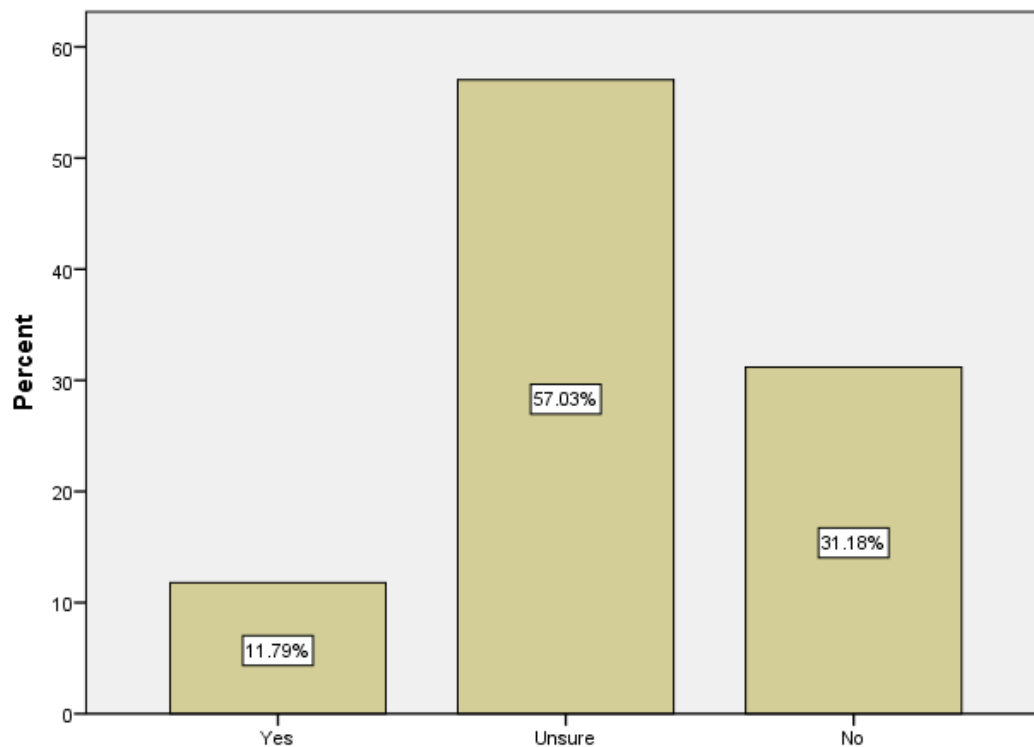


Figure 4.9 A guide on the utilisation of research findings (N=284)

A high percentage of respondents were unsure if the wards have a guide on the utilisation of research findings. This confirms the researcher's assumptions that the findings of research conducted on patient care are not implemented or utilised as a basis for quality patient care.

Out of N=284 respondents, 89 (31.18%) do not have a guide and only 33 (11.79%) have, which is a very low percentage in relation to N=284 of the respondents. These results are not very good as they are a reflection that evidence based practice is not implemented or applied to improve patient care. The same results were yielded by the study conducted by Florin et al (2012:889) confirming that evidence-based practice (EBP) is currently one of the most important underlying principles in modern health care.

The knowledge generation in health care, for example, in nursing and medicine, is quite extensive, leading to a rapidly growing knowledge base. However, the translation of that knowledge into clinical practice is often hampered (Grimshaw et al 2004; Thompson et al 2007 cited in Florin et al 2012:889), resulting in considerable variation in clinical practice, with the consequence that not all patients have equal access to appropriate care.

The utilisation of research findings is still lacking in South Africa, and 162 (57.03%) of respondents constitute the number of those who are unsure if there are directives on the use of research findings. In contrast, 33.8% do not at all have and only 16.5% have which is a relatively low percentage.

Davis et al (2014:1) conducted a study in the University of Cape Town whereby they stated that evidence-based nursing requires nurses to maintain an awareness of recently published research findings to integrate into their clinical practice, in contrary, in South African setting, keeping up with recent literature has additional challenges, including the diversity of nurses' home language, geographically foreign origins of published work and limited economic resources. In supporting this, Davis et al (2014:3), further said that practicing nurses' report that it is a challenge to keep abreast of and apply findings from research literature.

4.5.9 Recommendations for use of research findings

Table 4.12 Recommendations for use of research findings in practice (N=284)

Recommendations for use of research findings		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	211	74.3	86.5	86.5
	Unsure	24	8.5	9.8	96.3
	No	9	3.2	3.7	100.0
	Total	244	85.9	100.0	
Missing	System	40	14.1		
Total		284	100.0		

In this question, 246 (86.5%) respondents recommended that research findings should be used in practice, 28(9.8%) of the respondents were unsure and 11 (3.7%) did not recommend research. The highest percentage 246 (86.5%) suggested or indicated that they are very eager to acquire and use knowledge to render quality patient care. However, they lack the necessary research skills and support.

4.5.10 Mentoring by experienced ward staff

Table 4.13 Mentoring by experienced ward staff

Mentoring by experienced ward staff		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Always	178	62.7	65.9	65.9
	Sometimes	91	32.0	33.7	99.6
	Never	1	0.4	0.4	100.0
	Total	270	95.1	100.0	
Missing	System	14	4.9		
Total		284	100.0		

New nursing staff always receives mentoring from more experienced ward staff. This is confirmed by 187 (65.8%) which is followed by 96 (33.7%) of respondents who said sometimes. The responses below show that research activities are not applied to improve patient care which means the mentoring process is devoid of research, much as they are mentored by more experienced personnel the research component remains a challenge.

4.5.11 Effectiveness of present nursing systems for the evolving technological world

Table 4.14 Effectiveness of present nursing systems for the evolving technological world (N=284)

Effectiveness of present nursing systems for the evolving technological world		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	71	25.0	28.7	28.7
	Agree	120	42.3	48.6	77.3
	Disagree	12	4.2	4.9	82.2
	Strongly Disagree	44	15.5	17.8	100.0
	Total	247	87.0	100.0	
Missing	System	37	13.0		
Total		284	100.0		

Out of N=284 respondents, 138 (48.6%) agree that present nursing systems are effective in preparing nurse practitioners for the current evolving technological world. This is supported by Majid et al (2013:76), that, as nurses play crucial roles in the delivery of health care, they need to embrace new and innovative techniques to provide effective and best possible treatment to their patients. With the availability of large amount of medical information and information communication channels, it is desirable that nurses should know how to effectively identify, locate, evaluate and use quality information for their health care practices.

4.5.12 The benefits of adoption of the use of research findings in practise for the nurse practitioner who pursues the postgraduate degree

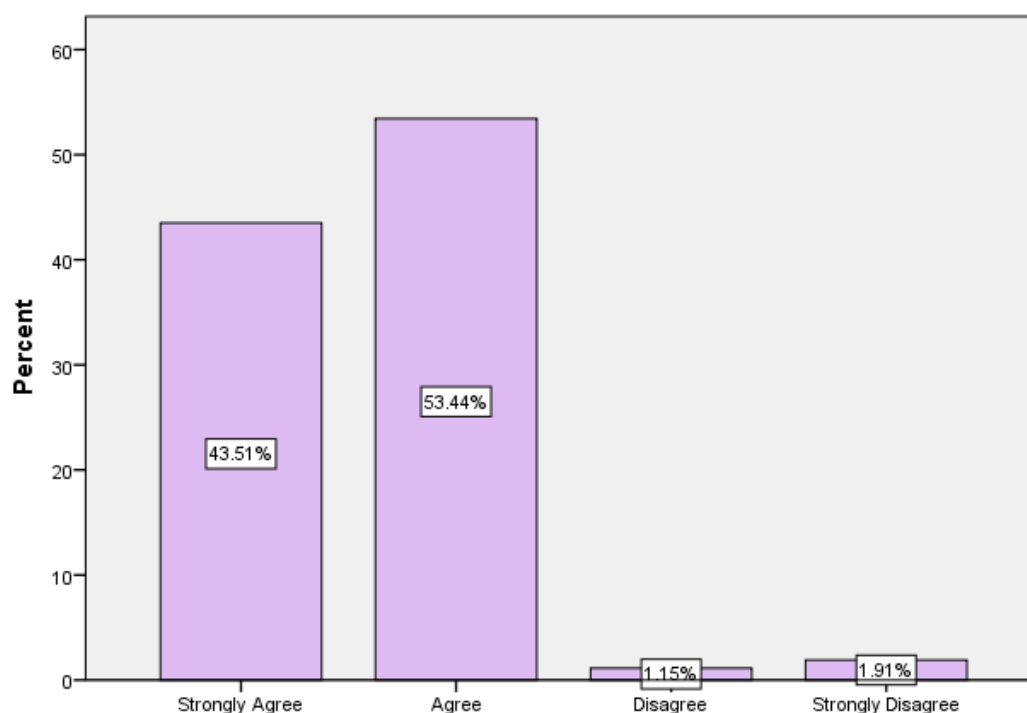


Figure 4.10 The benefits of adoption of the use of research findings in practise for the nurse practitioner who pursues the postgraduate degree (N=284)

Over half of respondents 152 (53.44%) agree that the adoption of the use of research findings in practise would benefit the nurse practitioner who pursues the postgraduate degree and the least percentage being 5 (1.91%) of respondents who strongly disagree. This proves that most respondents are in favour of research given the percentage of 'agree' and 124 (43.51%) of respondents who strongly agree.

However, the respondents had obstacles that their keenness to utilise research findings would not always suffice. In supporting this, Solomon and Spross (2011) cited in Hain and Kear (2015:12) stated that there are barriers in evidence based practice. Among many others, these were mentioned: experiencing time constraints, lack of resources, heavy workloads, lack of authority to practice and leaders and managers having priorities other than evidence-based practice.

4.6 CONCLUSION

In this chapter, descriptive statistics have been utilised to determine the frequencies of the occurrence of the variables, and non-parametric tests have been run and analysed to infer the findings to the population in chronological steps. An analysis of the relationship between the demographic data (gender, ethnicity, age, years of experience, position and utilisation of research findings) had been carried out.

Chapter 5 will then present a summary of conclusions, limitations and recommendations.

CHAPTER 5

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter presents a summary of conclusions, limitations and recommendations. A quantitative survey using a structured questionnaire was conducted with the aim of determining the professional nurses' perspectives on the utilisation of research findings in practice.

The purpose of the study is to make recommendations that will assist professional nurses in the utilisation of research findings in two public hospitals wherein nurse training is done in the uMgungundlovu District in KwaZulu-Natal. This study was guided by the following research questions:

- What are the professional nurses' perspectives on the utilisation of research findings?
- How can the utilisation of research findings be increased in the clinical nursing as perceived by the professional nurses?
- What are the research findings utilised in practice to positively influence patients' outcome?

The following objectives further guided this study:

- Determine professional nurses' perception of utilisation of research findings in practice
- Determine how the utilisation of research findings in practice be increased in clinical nursing as perceived by the professional nurses
- Determine research findings utilised in practice to positively influence patients' outcome

The researcher had in each and every chapter described all the details occurring in each chapter from Chapters 1 to 4 and lastly, in Chapter 5. In Chapter 1, the researcher described the background the purpose of the study and the significance of the study to nursing. The literature was reviewed wherein the objectives of the study were formulated. In this case, an in-depth review of the literature on the utilisation of research findings in practice was done, extensive literature search done. A conceptual framework related to the study was also included in chapter two detailing the relationships and the benefits to the study in relation to practice. The researcher described in detail the research methodology used in the study as it is the quantitative, descriptive, non-probability study. In Chapter 4, data analysis, interpretation of data and discussions were made. Chapter 5, which is the last chapter, describes the conclusions, study imitations and the recommendations that arise from the study.

5.2 RESEARCH DESIGN AND METHOD

A quantitative, non-experimental, descriptive survey was undertaken to generate information on the perceptive of the professional nurses on the utilisation of the research findings in practice. The objectives identified for the study guided the researcher on the selection of the research design. A non-probability sampling was used to obtain sample of 405 professional nurses at the two public institutions in the uMgungundlovu District at the Province of KwaZulu-Natal. However, only 284 respondents returned the completed questionnaires.

This study consisted of a literature study followed by a structured questionnaire to professional nurses working at the two public hospitals which trains the comprehensive programme with the purpose of describing their perspectives in the utilisation of research findings in practice. In addition, Burns and Grove (2010:239) view that some descriptive studies use questionnaires (surveys) to describe an identified area of concern. According to Brink et al (2012:109), survey studies are concerned with gathering information from a sample of the population by means of questionnaires, indirect observation and interviews.

5.3 SUMMARY OF FINDINGS AND CONCLUSIONS

5.3.1 Demographic information of respondents

The demographic profile of the professional nurses has a bearing on the outcomes of the study. Gender, age, ethnicity, highest educational qualifications, post-basic qualification, number of years the qualification was obtained and professional ranks are the demographic variables which are discussed in this section.

5.3.1.1 Gender

Overall, the ratio of males to females is approximately 1:6 (16.3%: 83.7%).

Within the age category of 31 to 40 years, the majority were female. The literature supports that females are in dominant in the nursing profession. When the historical development of women is examined, it is interesting that they have always been in an existence-struggle “I am” and have always been incapable of using the strength compared to men; which -undoubtedly- has always affected the nursing profession still regarded as a profession of women today (Duma et al 2012:182).

However, there is recruitment of male nurses which is started at high schools during career guidance. In 2011, there were 3.5 million employed nurses in the United States and 78% were registered nurses. A predicted shortage of nurses has increased recruiting and occupational retraining efforts to increase the pool of employable workers in this field. These efforts have included recruiting men into nursing (accessed 2015). Within the category most females were between the ages of 31 to 40 years. This category of females between the ages of 31 to 40 years formed 100 (35.3%) of the total sample.

5.3.1.2 Age

In Table 4.2, the age group shows that 31-40 years was the largest group of professional nurses which represented 247 (87%) of respondents in this study. The possible reason for this age range could be that many young nurses are produced yearly to practice in the two institutions under study and that on completion, those who

did the four year comprehensive diploma, first complete the service obligation before they can consider to seek job outside the province according to the contractual agreement they enter into when they start the course.

There was association between age and the respondent's preparedness to utilise the research findings. The researcher deduced that when looking at age of the respondents and the fact that professional nurses that would be well versed with research will supposedly be the recently qualified ones. This assumption is that the researcher stated in Chapter 1 that the research project started to be incorporated in the curriculum in 1986 when the R425 programme was commenced.

5.3.1.3 *Ethnicity*

It is not surprising that the racial composition of the study showed that the majority 190 (66.8%) of professional nurses are African (see Figure 4.1). This could be attributed to the fact that the black African population is the majority in KZN, and nationally (Statistics South Africa 2014), particularly females since the nursing profession is dominated by females. Therefore, the findings were compatible with the statistics.

5.3.1.4 *Highest educational qualifications*

Most respondents had a diploma in general nursing science which proved that the researcher rationally collected data from the professional nurses whom in the study are the respondents (see Figure 4.2). Furthermore, most professional nurses had the post basic registration, yielding the highest percentage for the child nursing science and few with critical care (see Figure 4.3: The post-basic qualifications of respondents (N=284) in Chapter 4.

5.3.2 Utilisation of research findings

In the study, it was found that the utilisation of research findings is hardly used in the institutions under study. The researcher had in the questionnaire formulated questions based on the teaching strategies as the baseline for establishing whether the respondents use evidence based in the clinical area to an extent that they go beyond parting the valuable information to the student nurses doing various training

programmes under their supervision in the clinical area (see Tables 4.7, 4.9, 4.11 and Figure 4.7). The researcher went on to ask about the learning strategies used by the respondents to improve patient care. It was again disappointing to discover that 'research' had majority of respondents (N=284), who, 'never' use research as a teaching strategy in. This percentage confirms that the respondents being the backbones in the units/ward are not rendering patient care which is evidenced-based given the percentage for 'never' in the findings. This is supported by Nwozichi et al (2014:186) when they argued that several studies have found out that only few nurses are engaged in research and this has led to the sluggish growth experienced in nursing profession.

5.3.2.1 Challenges or barriers to the utilisation of research findings in practice

A number of barriers and challenges were mentioned by the respondents which rendered the utilisation of research findings not being practiced in the clinical area. Among other barriers or challenges, the following were mentioned: lack of computer skills, lack of knowledge of research, workload and time constraints.

Table 4.16 depicts that the highest identified barriers were workload (81(69%). Several studies have found that both human and organisational factors are associated with barriers to the use of EBP, heavy workload, lack of staff experienced in EBP, and lack of resources (Khammarnia et al 2014:30).

Lack of knowledge of research 208 (73.24%) followed workload in this study. This is supported by Athanasakis (2013:18) that measuring nurses' reading habits (frequency of reading journals, last time read a nursing journal, the name of the journal) as a factor of research habits had been studied in several articles and it seems that nurses care about activities that upgrade both science and practice; nevertheless, it seems that they have insufficient knowledge and not much time is available to dedicate themselves research activities (Yava et al 2009 cited in Athanasakis 2013:180).

Time constraints had also been mentioned by most respondents as a barrier. The results which show the high percentage in terms of time constraints and lack of knowledge as a barrier to the utilisation of research findings was confirmed by O'Lynn et al (2012:35), whereby insufficient time to access and evaluate evidence is a challenge.

This barrier is further supported in a study by Khammarnia et al (2014:1), whereby time constraints were the barriers to the implementation of nursing research findings.

Lack of computer skills measured the highest percentage of respondents. Although nurses are becoming more educated with a growing proportion holding nursing degrees, nursing literature remained underutilised (Blythe & Royle 1993 cited in Majid et al 2013:69). As a result, implementation of research findings into clinical practices is often delayed, and there remains a gap between available research evidence and what is being practiced. On average, it takes 17 years for clinical research to be fully integrated into everyday practice (Balas 2001 cited in Majid et al 2013:69). This is due to lack of access to relevant information sources, and inadequate information on literacy skills.

The researcher with the figures at hand concludes that patient care is compromised in the clinical areas. These “nurses” who are supposed to be knowledgeable could hardly render quality care based on research findings as there are a variety of barriers surrounding its implementation.

Good staffing was also selected by majority of respondents as a means of increasing research utilisation. This is confirmed by the Hertel (2011:6) of research investigating whether or not patient quality has improved, since passage of California’s Assembly Bill 394 is mixed. After the bill was implemented into practice, the Agency for Healthcare Research and Quality’s (AHRQ) reported that its Patient Safety Indicators showed a significant reduction of patient falls, pressure ulcers, and restraint use.

Out of N=284, 185 (65%) selected the availability of library facilities as a way of increasing research utilisation in practice. Nurses need to possess basic skills for accessing relevant, accurate and current information to keep their knowledge up-to-date and hence adopt best medical practices (Jones, Schilling & Pesut 2001 cited in Majid et al 2013:69).

From the variables mentioned above, the researcher can make deductions that much as there are barriers and challenges facing the respondents, the respondents however, have ideas as to how the utilisation can be increased in practice. The respondents just need encouragement and availability of resources.

5.4 SUMMARY OF THE STUDY

In view of the global underutilisation of research findings in practice particularly in South Africa, the researcher gave comprehensive background information on the utilisation of research findings in practice in Chapter 1. The research questions were formulated based on the problem statement. The theoretical perspective definitions, research design, methods, researcher's role and ethical considerations were also discussed in Chapter 1. An in-depth literature review on research utilisation in practice was discussed in Chapter 2, together with an overview of the relevant conceptual frameworks for both variables.

In Chapter 3, the researcher discussed the research methodology. Data were collected using the structured questionnaire. The research questions were answered using a survey that used a quantitative, non-experimental, descriptive design. A pre-test of the questionnaire was done. Sampling criteria were considered. The ethical principles relevant to the study were considered before the main study was conducted by the researcher.

The data collected from the responses were analysed with SPSS version 23.0 by the Statistician. The results presented the descriptive statistics in the form of graphs, cross tabulations and other figures for the quantitative data that was collected.

Data analysed were presented in the respective tables. Finally, comments by the respondents were added and used to answer objectives of the study. The study findings were compiled to answer the research questions, the limitations of the study identified and recommendations based on findings provided for the Department of Health, the public hospitals under study and further research.

5.5 RECOMMENDATIONS

5.5.1 Clinical nursing practice

Most professional nurses when mentioning the barriers and challenges in the utilisation of research findings in the workplace, mentioned among others, lack of knowledge of research, lack of computer skills which and workload (see Table 4.16) which means

even if they can have enough manpower. However, lack of research knowledge creates a major barrier. Nevertheless, these nurses are highly motivated to become evidence-based practitioners. But they did not have much time and opportunity in the ward to learn about information search of the information from the computer (O'Lynn et al 2012:35; Khammarnia et al (2014:1). Therefore the following recommendations are made:

- The institutions have to develop programme for knowledge acquisitions such as workshops and staff training on the use of computers for knowledge acquisition and computer literacy.
- The nursing management can plan together with the nursing campuses to assist in empowering the staff at the clinical area and motivate the professional nurses to partake in hospital research committees meetings.
- The nursing hospital management should have meetings with nurses to motivate them to understand their responsibility in the clinical area of trying to identify areas of needed research since at the bedside nurses are particularly well situated to identify patient-related researchable problems.
- Librarians are an indispensable resource to evidence-based practice. The nursing management can help staff improve in computer skills by motivating for computer courses and motivate for more computers in the clinical areas since most computers in these institutions under study are used by medical doctors for accessing information for the doctors.
- The librarians can also be requested to assist the staff in accessing the information from the computer and make nursing journals available in the libraries in order to provide ready access to numerous sources of evidence-based material needed to improve patient care.
- Inclusion of professional nurses from the private hospitals can help to widen the research findings.
- Management can motivate for more posts and also to unfreeze frozen posts; this can further motivate staff to render effective nursing care based on evidence without failure.

5.5.2 Nursing education

There is a need for changes to be made in the nursing education system to attempt to improve research utilisation by professional nurses in practice since these health professionals working in the clinical area are produced by the campuses. These recommendations are ideal in transforming nursing education programmes into evidence-based education programmes in all the Nursing education institutions.

These recommendations can be achieved by:

- Re-looking at the new nursing curricula for the forthcoming new nursing qualifications for the Bachelor's degree and consider how critical appraisal of research can be integrated into each and every learning experience from first year of training to the final year, including learning of clinical skills. Among SANC's new nursing qualifications for the Bachelor's degree (R174) exit level points number (5), 'Utilise research in investigating nursing, midwifery and health-related problems' is also included.
- Allocating the students at least a half day in the computer laboratory providing hands-on experience in efficient advanced searching strategies to locate high-quality research evidence, and to link with resources that can automatically notify the student when new research findings are published in a specific area of interest. This can assist to equip students with computer skills and be ready to apply these skills in the clinical area even when employed as professional nurses.

5.5.3 Further research

It is of paramount importance to recommend for further research on the same study as it can yield different research results. The results of this study produced many questions for the researcher on the need for further research.

Further research can be conducted on the following:

- Preparedness of the professional nurses on the use of research findings. A qualitative study can be conducted on the perceptions of professional nurses on the utilisation of research findings in practice.
- Exploring the impact of workload on the utilisation of evidence-based knowledge on patient care.
- Time constraints versus utilisation of research findings in practice. A comparative study can be conducted to establish how time constraints affect the utilisation of evidence-based care.
- Nurse educators' experiences on the supervision of research projects among third year students doing the comprehensive four year programme (R425).

5.6 CONTRIBUTIONS OF THE STUDY

The patient care is dependent on highly skilled and knowledgeable nurses. It is for this reason that the nurses should keep abreast with the new advanced and research-based knowledge. In this study, the researcher established the history of nursing with regards to research from the times of the 'hero' Florence Nightingale to now with the advancement in technology and evidenced-based care.

The study was able to determine how then the utilisation of research findings can be increased in clinical area and ameliorate the barriers on the utilisation of research findings by the professional nurses.

The recommendations made in this study aim at empowering professional nurses, operational nurses, nurse managers and nursing education institutions with valuable information and benefits regarding the utilisation of research findings in practice.

5.7 LIMITATIONS OF THE STUDY

The study was limited to professional nurses who work in the institutions that do the four-year comprehensive nursing programme (R425). This study determined the professional nurses' perspectives on the utilisation of research findings in practice. Therefore, it may not be generalised to professional nurses' perceptions elsewhere. The

survey was conducted at two hospitals in the uMgungundlovu District in the KwaZulu-Natal Province. Therefore, the results might not be generalisable to professional nurses in other public hospitals wherein the four-year comprehensive training is done and work at other hospitals and in other provinces. As a result, this limitation may not provide a representative account of professional nurses' perspective elsewhere in the country.

The research was conducted on the public hospitals, and not collected from the professional nurses working in private hospitals who may have another version of the study. Therefore, the researcher viewed this as a barrier to getting more valuable information with regards to professional nurses' perspective in the utilisation of research findings.

The data collection process was guaranteed to be anonymous. There was no way of knowing who had not returned a questionnaire. The researcher also had a challenge in getting all the questionnaires back as some respondents were day off on the arranged day of collection and others were not available due to unforeseen circumstances like vacational leave, family responsibility leave and sick leave.

There was a wide gap in terms of months in data collection between the two institutions under study. In the first institution, the collection of data took place in the month of February 2015 whereas in the other institution, it was collected in April 2015. It took the researcher two months apart as there would be urgent meetings and could not get the desired number of the sample size on time.

The results of this study can in any case be regarded as important for the review of the curriculum of research component at the training institutions of the basic nursing programmes. When doing the study, the R425 programme was being in the process of being phased out in June 2017 and replaced by the Bachelor's degree (R174) which will be done at some of the selected campuses and the three-year diploma in some other campuses.

The majority of the professional nurses who completed the questionnaires were N= 284. Out of 284, only 213 (75%) respondents made use of the comments by responding to the open-ended questions requesting to state their views on what makes learning motivating (see Table 4.14). The researcher asked about this question with an aim of

establishing the respondents' willingness to learn whereby in the end their perceptions will also motivate them to utilise research findings. The low response rate also may have not adequately portrayed the entire perceived motivators of research utilisation in the clinical area by the professional nurses. The right of the respondents to not being coerced to respond to any item that they did not wish to answer increased the high rate of missing responses to items in the questionnaire when the respondents' opinions would have been gathered by completing the items.

5.8 CONCLUSION

A quantitative, non-experimental, descriptive survey was undertaken to generate information on the perspectives of the professional nurses on the utilisation of the research findings in practice. The aim of the study was to determine the professional nurses' perspectives on the utilisation of research findings.

The results indicate that professional nurses lack knowledge of research. However, in the findings it also transpired that other factors contribute to them not being able to utilise research findings such as workload and time constraints. It is encouraging that the professional nurses from the two institutions under study are keen to learn if only barriers to research utilisation can be eradicated. The recommendations made by the researcher for this study will help such challenges to be addressed to relevant stakeholders.

In this chapter, the researcher deliberated on the findings of the study, study limitations and recommendations with regards to professional nurses' perspectives on the utilisation of research findings.

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ANNEXURES

ANNEXURE A: ETHICAL APPROVAL CERTIFICATE FROM THE UNIVERSITY OF SOUTH AFRICA



**UNIVERSITY OF SOUTH AFRICA
Health Studies Higher Degrees Committee
College of Human Sciences
ETHICAL CLEARANCE CERTIFICATE**

REC-012714-039

HS HDC/346/2014

Date: 26 November 2014 Student No: 3056-024-1
Project Title: Utilization of research findings in practice: Professional Nurses' Perspectives.
Researcher: Hlengiwe Petronella Mngomezulu
Degree: MA in Nursing Code: MPCH594
Supervisor: Dr TE Masango
Qualification: PhD
Joint Supervisor: -

DECISION OF COMMITTEE

Approved ☒

Conditionally Approved ☐

for Prof L Roets
CHAIRPERSON: HEALTH STUDIES HIGHER DEGREES COMMITTEE

L. Roets (Prof)

MM Moleki

Prof MM Moleki
ACADEMIC CHAIRPERSON: DEPARTMENT OF HEALTH STUDIES

PLEASE QUOTE THE PROJECT NUMBER IN ALL ENQUIRES

ANNEXURE B: PERMISSION LETTERS TO HOSPITALS UNDER STUDY

STUDENT NUMBER

3	0	5	6	0	2	4	1
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159 Murray Road
Hayfields
Pietermaritzburg
3201

14th January 2015

Hospital Manager
Grey's/Edendale Hospital
Private Bag X509
Pietermaritzburg
Dear Madam

PERMISSION TO CONDUCT THE STUDY

I hereby request to conduct the research study among Professional nurses placed in the hospital. The research project is a requirement for a Master's Degree in Health Sciences at the University of South Africa under supervision of Dr T.E.Masango as a supervisor.

The purpose of the study is to develop guidelines that will assist Professional nurses in the utilization of research findings in practice. The study findings will benefit the patient's outcome and minimize hospital expenditure. The institution will operationalise the findings to its benefit of quality patient care and the good reputation of the Institution.

Your permission is sought to have access to the wards and nursing management in order to identify Professional nurses that will fit the criteria for inclusion to the study. Professional nurses will be approached individually to obtain their voluntary informed consent.

Confidentiality and anonymity will be maintained as respondents' names and the name of the institution will not be published. Questionnaires will be given to participants. The perspectives of Professional nurses with regard to the utilization of research findings in practice will not be jeopardized.

If you wish to speak to someone not directly involved you may contact:
The Chairperson
Ethics Subcommittee of the College of Human Sciences at Unisa
Tel: 012 – 4294067

Thank you in advance

Yours Faithfully

Mrs Hlengiwe Petronella Mngomezulu (Cell: 0721440529
8973505)Email:hlengiwe.mngomezulu@kznhealth.gov.za/shamp@telkomsa.net
Master's Degree Student

Work: 033 –

ANNEXURE C: LETTERS GRANTING PERMISSION FROM THE HOSPITALS



health

Department:
Health
PROVINCE OF KWAZULU-NATAL

GREYS HOSPITAL
OFFICE OF THE CEO
Private Bag X 9001, Pietermaritzburg, 3200
Town Bush Road, Chase Valley, Pietermaritzburg, 3201
Tel.: 033 - 897 3321 Fax.: 033 - 897 3388
www.kznhealth.gov.za

To:	Mrs. Hlengiwe Mngomezulu 159 Murray Road, Hayfields, Pietermaritzburg 3201
From:	Dr. K. B. Bilenge CEO - Greys Hospital
Date:	19 January 2015
Re:	Request for permission to conduct research at Grey's Hospital: <i>Utilization of Research Findings in Practice: Professional Nurses' Perspectives</i>

Dear Mrs. Mngomezulu

Your request to conduct research at Grey's Hospital refers.

Permission to conduct the above study is hereby granted under the following conditions:

- Your ethics approval is assumed to be valid;
- You are also required to obtain approval for your study from the Provincial Department of Health KZN Health Research Unit prior to commencing your study at Grey's Hospital. You will find more information on their website: <http://www.kznhealth.gov.za/hrkm.htm>
- Confidentiality of hospital information, including staff and patient medical and/or contact information, must be kept at all times;
- You are to ensure that your data collection process will not interfere with your routine services at the hospital, i.e. research activities to be conducted after hours or during tea/lunch breaks;
- You are to ensure that hospital resources are not used, e.g. staff collecting data; photocopying; telephone; facsimile, etc.;
- Informed consent is to be obtained from all participants in your study, if applicable;
- Policies, guidelines and protocols of the Department of Health and Grey's Hospital must be adhered to at all times;
- Professional attitude and behaviour whilst dealing with research participants must be exhibited;
- The Department of Health, hospital and its staff will not be held responsible for any negative incidents and/or consequences, including injuries and illnesses that may be contracted on site, litigation matters, etc. that may arise as a result of your study or your presence on site;
- You are required to submit to this office a summary of study findings upon completion of your research.
- You are requested to make contact with the Nursing Manager, Mrs. K.T. McKenzie, at Grey's Hospital once you are ready to commence data collection.

Recommended by:

Dr E. Naidoo
Senior Manager: Medical Services

Date

19/1/2015

Approved by:

Dr. K. B. Bilenge
Hospital CEO

Date

20/01/2015

uMnyango Wezempilo . Departement van Gesondheid

Fighting Disease, Fighting Poverty, Giving Hope



health

Department:
Health
PROVINCE OF KWAZULU-NATAL

Edendale Hospital
Private Bag X 509, Plessislaer, 3216
Tel: 033 395 4040, Fax: 033 395 4087
email: sanele.mkhize2@kznhealth.gov.za
www.kznhealth.gov.za

OFFICE OF THE CHIEF EXECUTIVE OFFICER

Reference No.33/5/1

Enquiries: Mrs. PP Sigcawu
Tel: 033-3954040

Date: 19 January 2015

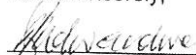
Mrs H.P Mngomezulu
159 Murray Road
Hayfields
Pietermaritzburg
3201

Dear Ms Mngomezulu

**RE- REQUEST TO CONDUCT A RESEARCH: "UTILIZATION OF RESEARCH
FINDINGS IN PRACTICE: PROFESSIONAL NURSES PERSPECTIVES".**

Your request to conduct the above-mentioned surveillance is supported by Edendale Hospital Management, subject to approval by Provincial Health Research Committee in the Department of Health.

Yours sincerely,


MRS ZSI NDWANDWE
CHIEF EXECUTIVE OFFICER
EDENDALE HOSPITAL

ANNEXURE D: CONSENT FROM THE KWAZULU-NATAL DEPARTMENT OF HEALTH



health

Department:
Health
PROVINCE OF KWAZULU-NATAL

Health Research & Knowledge Management sub-component
10 – 103 Natalia Building, 330 Langalibalele Street
Private Bag x9051
Pietermaritzburg
3200
Tel.: 033 – 3953189
Fax.: 033 – 394 3782
Email.: hrkm@kznhealth.gov.za
www.kznhealth.gov.za

Reference : HRKM 032/15
NHRD: KZ_2015RP44_648
Enquiries : Mr X Xaba
Tel : 033 – 395 2805

Dear Mrs H.P. Mngomezulu

Subject: Approval of a Research Proposal

1. The research proposal titled 'Utilization of reseach findings in practice: Nurses perspectives' was reviewed by the KwaZulu-Natal Department of Health.

The proposal is hereby **approved** for research to be undertaken at Greys and Edendale Hospital.

2. You are requested to take note of the following:
 - a. Make the necessary arrangement with the identified facility before commencing with your research project.
 - b. Provide an interim progress report and final report (electronic and hard copies) when your research is complete.
3. Your final report must be posted to **HEALTH RESEARCH AND KNOWLEDGE MANAGEMENT, 10-102, PRIVATE BAG X9051, PIETERMARITZBURG, 3200** and e-mail an electronic copy to hrkm@kznhealth.gov.za

For any additional information please contact Mr X. Xaba on 033-395 2805.

Yours Sincerely



Dr E Lutge

Chairperson, Health Research Committee

Date: 18/02/15

uMnyango Wezempilo . Departement van Gesondheid

Fighting Disease, Fighting Poverty, Giving Hope

ANNEXURE E: PERMISSION TO USE THE QUESTIONNAIRE FROM V. HEASLIP

159 Murray Road
Hayfields
3201
22 February 2015
Bournemouth University
Christ Church Road
Bournemouth, BH1 3LH
Dear Madam

RE: PERMISSION TO USE YOUR RESEARCH QUESTIONNAIRE.

I have been trying to contact you on this number;01202961774 as it appears on your contact details but it did not get through, instead it keeps saying that the number does not exist. The reason I needed to call you is that I am kindly requesting permission to use your data collection tool, to adapt mine from it. My study topic is: Utilization of research findings in practice: Professional nurses' perspectives.

Kindly email permission to me and my supervisor.

My supervisor is Dr T.E Masango, her email address is masante@unisa.ac.za.

My email address is shamp@telkomsa.net

Kind Regards

Hlengiwe Petronella Mngomezulu

Contact: 0721440529

Hi Hlengi

I have heard back from the co-author she is also happy for you to use the questionnaire as long as we are acknowledged in your study

Regards

Vanessa

From: Vanessa Heaslip **Sent:** 23 February 2015 10:36 **To:** 'Hlengi' **Cc:** Jaqui Hewitt-Taylor **Subject:** RE: RE: PERMISSION TO USE QUESTIONNAIRE

Hi Hlengi

Thank you for contacting me – I don't know why the telephone number would not let you through as it is the correct number. I have no problems with you using the questionnaire – however I have just cc'd my co-author in to check she is also okay with this. Obviously, we would need acknowledging within your study that you adapted our questionnaire.

Regards

Vanessa

Vanessa Heaslip

Senior Lecturer

Faculty of Health and Social Sciences

Bournemouth University

Independent Member Mary Seacole Steering Committee

Associate Editor International Journal of Research in Nursing

Editorial Board British Journal of Community Nursing

From: Hlengi [mailto:online2147845@telkomsa.net] **Sent:** 21 February 2015 21:01 **To:** Vanessa Heaslip **Subject:** RE: PERMISSION TO USE QUESTIONNAIRE

ANNEXURE F: PARTICIPANT'S INFORMATION

Survey Questionnaire – professional nurses

Invitation to participate: I am invited to participate in the above-mentioned research study.

Study Purpose: The purpose of this study is to develop guidelines that will assist professional nurses in two public hospitals at uMgungundlovu district at KwaZulu-Natal in the utilization of research findings.

The specific objectives of this study are to:

1. Understand the perspectives of professional nurses with regard to the utilization of research findings in practice.
2. Recommend ways in which research findings can be used in practice in order to improve patient outcome.
3. Suggest quality improvement strategies with regard to research utilization in practice by professional nurses to positively maximize patient outcome and minimize hospital expenditure.

Participation: I am asked to participate in the study by completing a questionnaire about utilization of research findings: professional nurses' perspectives. My participation will take approximately 45 minutes. Data will be used to identify and describe professional nurses' perspectives with regard to the utilization of research findings in practice. The results may also bring changes and improvement in the utilization of research findings thereby improving patient care. The study may influence nurse managers to encourage professional nurses and student nurses to develop interest in research utilization thus motivating them to pursue to further their professional career in research. The researcher (master student), the supervisor and the statistician will only be allowed access to data. No secondary analysis will be done on the data.

Risks: There are no risks involved in my participation in the study. My decision as to whether or not to participate in the study will not have any positive or negative repercussions for me. I know that I may withdraw from the study at any time.

Benefits: My participation in the study will not be of direct benefit to me, however, it will give me an opportunity to contribute to addressing importance of the utilization of research findings in practice. The information I share may help identify strategies to motivate nurses to improve patient outcome through the utilization of research findings.

Confidentiality and anonymity: I have received assurance from the researcher (master student) that any information shared will remain confidential. I understand that the contents will be used only for the purpose of the study and that my confidentiality will be protected. The contents will only be discussed within the research team (master student, supervisor and statistician). Anonymity will be protected by not indicating my name with my responses or identified in any way. Since aggregate results will be published, my identity will not be revealed in any publications or reports.

Conservation of data: The completed questionnaires will be kept in a locked filing system in the project office in Pietermaritzburg. All computers, on which study data is stored, will be password-protected. The data will be accessible to the research team. The data will be stored for seven days following completion of the study or publication of the related articles, after which time the questionnaires and other paper data will be destroyed.

Compensation: There will be no monetary compensation for my participation in the study.

Voluntary participation: I am under no obligation to participate; if I choose to participate, I may withdraw from the study at any time.

Study Feedback: The researcher will ensure that feedback on the study findings is communicated to participants.

This study has received ethical approval from the University of South Africa (UNISA) Research Ethics Board. Furthermore within the KwaZulu- Natal provincial context, the research project has received full ethical approval from:

- University of South Africa's Ethics Committee (Ethics number approved)
- Department of Health- KwaZulu- Natal Province and
- The relevant permission from the district and institutional level.

For Ethical queries, please contact:

Supervisor: Dr Thembekile Masango

University of South Africa, Pretoria Campus

Tel (w): 012 429 3386

Email: masante@unisa.ac.za

The Researcher: H.P. Mngomezulu (Master student)

Tel: 033 8973505 / 0721440529

Email: shamp@tekomsa.net

ANNEXURE G: CONSENT FORM

I have read and understood the contents of the participant's information letter given to me, by the researcher. The study has also been verbally explained to me by the researcher.

I therefore give my voluntary participation on this study under the following conditions:

I understand that during the research study, there will be questionnaires issued out by the researcher to capture all the information that is required for the study.

I realize that my participation in this study is entirely voluntary, and I may withdraw from the study at any time, I wish to. If I decide to discontinue my participation in the study, I will continue to be treated in the usual and customary fashion.

I understand that all study data will be kept confidential; however, this information may be used in the Nursing Publications or Presentations by the researcher and supervisor.

If needed, I can contact the researcher and/or the supervisor Dr T.E.Masango, University of South Africa (UNISA) - Department of Health Studies, any time during the study.

I have read and understood this consent form, all my questions have been answered, and I agree to participate.

Participant's signature: _____ Date and time _____

Researcher's signature: _____ Date and time: _____

Witness: _____

ANNEXURE H: QUESTIONNAIRE

TITLE: Utilization of research findings in Practice: Professional nurses' perspectives

Researcher: Mngomezulu H.P.

STUDENT

3 0 5 6 0 2 4 1

Utilization of research findings in practice: professional nurses' perspectives.

QUESTIONNAIRE

Please cross[X] next to the most appropriate answer in the box provided.

SECTION A

DEMOGRAPHIC DETAILS

1. Gender

M

2. Age

24 -30 years

31 – 40 years

41 – 50 years

51 – 60 years

61 – 65 years

3. Ethnicity

African

Coloured

Indian

White

Other

[Specify]

4. Highest educational qualification.

Doctoral degree in nursing

Master's degree in nursing

Bachelor's degree in nursing

Diploma in Nursing

Other: Please specify

5. Post Basic qualification.

Diploma

in

Nursing

Administration

Diploma in Nursing Education

☐

Diploma in Advanced Midwifery and Neonatal Nursing

☐

Diploma in child nursing science

☐

Diploma in Critical care nursing

☐

Diploma in Operating Theatre Nursing

☐

Diploma in Orthopaedic Nursing

☐

Other: Please specify

6. When was the above qualification obtained?

Mark the appropriate box with an X

< 5 years ago

6 – 10 years ago

11 – 15 years ago

16 – 20 years ago

>20 years ago

7. Please specify your position

Operational Manager

Nurse Manager

Other: specify

<input type="checkbox"/>
<input type="checkbox"/>
<input type="text"/>

SECTION B

CLINICAL EXPERIENCE

8. How many years in nursing

1 – 5 years

6 – 10 years

11 – 15 years

16 – 20 years

21 – 30 years

31 – 35 years

> 40yrs

9. Which wards/clinical area are you working in?

Medical

Surgical

Paediatric

Renal Unit

Critical care

Out patient

Trauma and emergency/Casualty

Maternity

Gynaecological ward

Operating Theatre

Oncology

Orthopaedics

Other: Please specify

10. Which method of Patient care are you using in your unit? [You may choose more than 1 option]

	METHOD	ALWAYS	SOMETIMES	NEVER
10.1	Functional method			
10.2	Team method			
10.3	Primary nursing			
10.4	Modular nursing			

11. Which nursing students are you having under your supervision in the clinical area?

[You may choose more than 1 option]

COURSE	FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
R425 (4-year programme)				
R683 (Bridging course)				
R254 (1-year Midwifery)				
R212 (Post basic course)				
OTHER				

Post Basic Course: Specify course

SECTION C

LEARNING STRATEGIES

12. Choose the learning strategies that you use currently. [You may choose more than 1 strategy]

	LEARNING STRATEGIES	ALWAYS	SOMETIMES	NEVER
12.1	Nursing rounds			
12.2	Nursing care plans			
12.3	Team conference			
21.4	Nursing care conference			
12.5	Discussions			
12.6	Ward rounds			
12.7	Projects			
12.8	Case study			
12.9	Orientation programme			
21.10	Teaching programme			
12.11	Research			
12.12	Portfolios			
12.13	Evidence based			

13. Select the teaching strategies used or currently being used to teach the following learners for the R425 programme in your unit. (You may choose more than one teaching strategy per subject area.)

NB: If you are not involved in teaching the R425 programme please write not applicable (N/A) in the box provided.

Frequency of use		Always	Sometim as	Never
13.1	Lecture method			
13.2	Small group discussions			
13.3	Problem based learning			
12.4	Case based studies			
13.5	Questioning			
13.6	Reflective thinking/Journals			
13.7	Outcome based			
14.				
32.8	Demonstration			
13.9	Workbooks			
13.10	Nursing Rounds			
13.11	Ward Rounds			
13.12	Evidence based			

Select the teaching strategy used or currently in use for teaching R683 programme in your unit. (You may choose more than one strategy)

NB: If you are not involved in teaching the R683 programme please write not applicable (N/A) in the box provided.

Frequency of use		Always	Sometim as	Never
14.1	Lecture method			
14.2	Small group discussions			
14.3	Problem based learning			
14.4	Case based studies			
14.5	Questioning			
14.6	Reflective thinking/Journals			
14.7	Outcome based			
14.8	Demonstration			
14.9	Workbooks			
14.10	Nursing Rounds			
14.11	Ward Rounds			
14.12	Evidence based			
14.13	Projects			
14.14	Teachable moments			

15. Select the teaching strategy used or currently used for teaching R212 programme in your unit (You may choose more than one strategy)

NB: If you are not involved in teaching the R212 programme please write not applicable (N/A) in the box provided.

Frequency of use		Always	Sometime	Never
15.1	Lecture method			
15.2	Small group discussions			
15.3	Problem based learning			

- 15.4 Case based studies
- 15.5 Role play
- 15.6 Simulation
- 15.7 Narrative styles
- 15.8 Inquiry/Socratic questioning
- 15.9 Portfolios
- 15.10 Reflective thinking/Journals
- 15.11 Web based teaching
- 15.12 Evidence based
- 15.13 Community based
- 15.14 Demonstration

16. Select the teaching strategy used or currently being used to teach the R254 programme. (You may choose more than one strategy)

NB: If you are not involved in teaching the R254 programme please write not applicable (N/A) in the box provided.

Frequency of use		Always	Sometimes	Never
16.1	Lecture method			
16.2	Small group discussions			
16.3	Problem based learning			
16.4	Case based studies			
16.5	Demonstration			
16.6	Simulation			
16.7	Narrative styles			
16.8	Inquiry/Socratic questioning			
16.9	Portfolios			
16.10	Reflective thinking/Journals			

16.11 Web based teaching

16.12 Evidence based

16.13 Community based

18. Do you assess the level of training of students when deciding on a teaching strategy?

Always

Sometim

Never

19. Do you assess the learning styles of students before you start teaching?

Always

Sometim

Never

20. Is there a tool available to assess learning in your unit?

Yes

No

SECTION D

EVALUATION OF TEACHING STRATEGIES

22. Do you evaluate the effectiveness of your teaching strategy?

Always

Sometim

Never

23. Do you evaluate the learners' competencies in your unit?

Always

Sometim

Never

24. Do you allow students to evaluate the effectiveness of your teaching?

Always

Sometim

Never

25. Does a tool exist in your unit to evaluate teaching strategies used by nurse educators?

Yes

No

26. If you evaluate your teaching strategies, specify how you do so.

26.1 Self-assessment

26.2 Student assessment

26.3 Peer reviews

26.4 Students' assessment results

26.6 Other: Specify

--

27. In your view what makes learning motivating.

28. Select the factors that may produce challenges or barriers to the use of research findings. (You may choose more than one response).

28.1 Lack of knowledge of research	<input type="checkbox"/>
28.2 Workload	<input type="checkbox"/>
28.3 Individual barriers	<input type="checkbox"/>
28. Time constraints	<input type="checkbox"/>
28.5 Learning styles of students	<input type="checkbox"/>
28.6 Time taken to go to the library	<input type="checkbox"/>
28.7 Lack of computer skills	<input type="checkbox"/>
28.8 Limited support from the superiors	<input type="checkbox"/>
28.9 Lack of interest of research	<input type="checkbox"/>
28.10 Lack of library facilities	<input type="checkbox"/>
28.11 Lack of experience in nursing education by the lecturer	<input type="checkbox"/>
28.12 Lack of support given to new nursing educators	<input type="checkbox"/>
28.13 Lack of knowledge and skill by the lecturer regarding the use of strategies	<input type="checkbox"/>
28.14 Lack of in-service training on the use of teaching methodologies	<input type="checkbox"/>
28.15 Other:	<input type="checkbox"/> Specify

29. Select the ways that you think the utilization of research findings be increased in clinical nursing.

29.1 Library facilities	<input type="checkbox"/>
29.2 Good staffing	<input type="checkbox"/>
29.3 Availability of nursing journals	<input type="checkbox"/>
29.4 Workshops	<input type="checkbox"/>
29.5 Availability of computers at the workplace	<input type="checkbox"/>
29.6 Involvements in research projects	<input type="checkbox"/>
29.7 Involvement in research ethics committee	<input type="checkbox"/>
29.8 Support from the superiors	<input type="checkbox"/>

30. Select the ways in which research findings can be used to positively increase patient care.

30.1 Used on patients with a rare condition

☐

30.2 Use of research projects

☐

30.3 Problem based care

☐

30.4 Case based care

☐

30.5 Employment of masters' staff

☐

30.6 Specialization

☐

30.7 Use of nursing journals

☐

30.8 Time given to do research projects

☐

30.9 Ward rounds

☐

30.10 Patient care monthly audit

☐

30.11 Other

31. Do you have a guide in your ward on the utilization of research findings?

Yes

No

Unsur

32. Do the ward policies have directives for use of research findings?

Yes

No

Unsur

33. Do you think that it is necessary for research findings to be recommended for use in practice?

Yes

No

Unsur

34. Do new nursing staff receive mentoring from more experienced ward staff?

Always

Sometim

Never

35. Present nursing systems are effective in preparing the nurse practitioner for the current evolving technological environment.

Stronaly

Aagree

Stronaly

Disagree

36. The adoption of the use of research findings in practise would benefit the nurse practitioner who pursues the post grade degree.

Stronaly

Aagree

Stronaly

Disagree

37. Are you willing to use research to positively improve patient care?

Yes

Unsure

38. Do you have any suggestions on how managers who are not using research findings approaches can be guided towards adopting this strategy

☐ Yes

☐ No

Reason:

Thank you for your participation