

**PERCEPTIONS OF PROFESSIONAL NURSES ON THE IMPACT OF SHORTAGE OF
RESOURCES FOR QUALITY PATIENT CARE IN A PUBLIC HOSPITAL: LIMPOPO
PROVINCE**

by

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SUPERVISOR: PROF ZZ NKOSI

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DECLARATION

I declare that **PERCEPTIONS OF PROFESSIONAL NURSES ON THE IMPACT OF SHORTAGE OF RESOURCES FOR QUALITY PATIENT CARE IN A PUBLIC HOSPITAL: LIMPOPO PROVINCE** 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.

Machidi Julia Mokoena

30 November 2016

.....
SIGNATURE

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PERCEPTIONS OF PROFESSIONAL NURSES ON THE IMPACT OF SHORTAGE OF RESOURCES FOR QUALITY PATIENT CARE IN A PUBLIC HOSPITAL: LIMPOPO PROVINCE

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ABSTRACT

Professional nurses are regarded as the backbone of the health care system and quality patient care is linked to patient safety. The purpose of the study was to describe and explore the perceptions of professional nurses on impact of shortage of resources for quality patient care. The resources include health professionals, equipment and drugs. The study was conducted in Mankweng hospital which is a public hospital in the Capricorn district in Limpopo Province.

Qualitative descriptive exploratory design was used which provided the researcher with in-depth information regarding phenomena under study. Data was collected from ten (10) professional nurses who have 5 to 20 years of nursing experience allocated in medical and surgical wards. Unstructured face-to-face interview was conducted using field notes and audio tape.

Data was analysed following Creswell (2014) Tesch method. Five themes and eighteen subthemes emerged from data. The findings revealed that the shortage of health professionals and inadequate resources has a negative impact on provision of quality patient care.

Key concepts

Health professionals; impact; perceptions; public hospital; quality patient care; resources.

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LIST OF ABBREVIATIONS

ARVs	Antiretrovirals
CEO	Chief Executive Officer
DENOSA	Democratic Nursing Organisation in South Africa
GDP	Gross Domestic Product
IOM	Institute of Medicine
LOS	Length of Stay
NDOH	National Department of Health
NEC	National Executive Committee
NHD	National Health Department
NHI	National Health Insurance
NHP	National Health Plan
PHC	Primary Health Care
SA	South Africa
SANC	South African Nursing Council.
SGD	Sustainable Development Goals
TB	Tuberculosis
UNISA	University of South Africa
WHO	World Health Organization

CHAPTER 1

ORIENTATION TO THE STUDY

1.1 INTRODUCTION

The National Department of Health in South Africa's goal is to provide quality health services to the whole population (Muller 2011:20). Most of the health programs give emphasis to quality patient care. Batho pele -principle about value for money support the statement. It emphasizes that public services should be provided economically and efficiently in order to give citizens the best possible value for money (Muller 2011:20). Quality health care is viewed as the overarching umbrella under which patient safety resides (Hughes 2008:4). According to the Institute of Medicine (IOM), patient safety has emerged from the health care quality movement as the prevention of harm to patients and is built on a culture of safety that involves health care professionals, organisations and patients (Mitchell 2008:1-2).

South Africa is in the process of introducing innovative system of health care financing with far reaching consequences on the health of South Africans. The National Health Insurance commonly referred to as NHI will ensure that everyone has access to appropriate, efficient and quality health services. It will be phased in over a period of 14 years. This will entail major changes in the service delivery structures, administrative and management system (South Africa 2011a:4).

The study conducted by Nkomo (2013:79) revealed that professional nurses identified lax management of hospitals as affecting quality of service provided in public hospital. Aspects of the practice environment especially availability of resources and adequate staffing are good indicators of quality patient care (Zander, Dobler & Busse 2013:224). Human resource shortages and shortage of equipment are major constraints to patient care, and the running of a medical department (Agyeman-Duah, Theurer, Muthali, Alide & Neuham 2014:3) as nurses play a vital role in improving the safety and quality of patient care, not only in the hospital or ambulatory treatment facility but also of community-based care (Hughes 2008:28).

The National Department of Health (NDOH) has consulted with medical scheme administrators, labour, pharmaceutical industry, professional association for various occupations, statutory bodies, government departments, academia, civil society and parliament. Since the launch of the NHI Green Paper, over 100 submissions have been made to the NDOH and international conference was held to exchange experience of introducing universal coverage in other countries (Matsoso & Fryatt 2013:156). The country is implementing NHI in twelve pilot sites country wide so as to assess whether the policy will improve quality patient care (Matsoso & Fryatt 2013:156).

Global experiences show the importance of primary health care (PHC) being at the Centre of service delivery, promoting good health, preventing illness, and acting as the first point of contact for most health care, human resources are a key constraint and staff norms are being finalised with World Health Organization (WHO) support (Matsoso 2013:84).

1.2 BACKGROUND OF THE STUDY

South Africa is experiencing shortage of skilled health professionals; they leave public sectors to private sector where they are adequately remunerated resulting in gross shortage in the public sector. One hospital in KwaZulu-Natal does not have intensive care unit to provide the patient with the highly critical care. It does not even have an ambulance, getting to see a doctor is becoming more difficult every day. Whether is it at the clinic or at a private practice, the queues are getting longer and longer (WHO 2012).

In Limpopo, one public hospital ran short of tenefovir, lamudivine was out of stock at the province's main depot and stavudine was in short supply at several health facilities (Bateman 2013:600). Nurse shortage is a global problem and South Africa is more affected by this because nurses leave the country for better salaries in the developed countries. The problem of migration of nurses has taken mostly the best or the key employees who have post-basic clinical training, such as theatre nurses (Dolamo & Masango 2013:51).

The nursing profession is regarded as the backbone of the health care system in ensuring that patient care is delivered according to expected outcomes. Quality patient care is regarded as the overarching umbrella under which patient care resides (Hughes 2008:2).

According to Delihlazo (2014:41), the National Executive Committee (NEC) of Democratic Nursing Association of Nurses in South Africa (DENOSA) indicates the need to strengthen the capacitation of nurses in the form of continuous professional development via professional institute (DENOSA professional institute). But due to a gross shortage of nurses' country wide it is proving to be a difficult task to empower nurses through training, as every nurse's service is needed 24/7. This poses a challenge where nurses will remain with knowledge they acquired before they get employed. As a result, nursing service managers are finding themselves in a position where they often decline nurses from acquiring knowledge. DENOSA believes this can be addressed through hiring of nurses. Human resource is one element that makes up a positive practice environment (PPE), which is a campaign that we embark on as a call by health professionals (nurses and doctors) to improve the standard of services that we provide to patients by having enough equipment, resources, training and support among others (Delihlazo 2014:41).

Recently, considerable attention has been focused on the apparent shortage of health workers in countries with the poorest health indicators, and the potential impact of the shortage on countries ability to fight diseases and provide essential, life serving interventions. According to WHO estimates, the current workforce in some of the most affected countries in sub-Saharan Africa would need to be scaled up by as much as 140% to attain international health development targets (Kinfu, Dal Poz, Mercer & Evans 2014:225). Health worker shortage in sub-Saharan Africa derives from many causes, including past investment shortfalls in pre-service training, international migration, and career changes among health workers, premature retirement, morbidity, and mortality. Yet the dynamics on entry into and exit from health workforce in many countries remains poorly understood (Kinfu et al 2014:225).

The migration of health care workers from developing countries to developed ones is a well-recognized contributor to weak health systems in low income countries and is considered a primary threat to achieving the health related millennium development goals. In 2010 the WHO assembly unanimously adopted the first code practice on international recruitment of health personnel, which recognizes problems related to global shortage of health staff and calls wealthy countries to provide financial assistance to source countries affected by losses of health workers (Mill, Kanters, Hagopian, Bansback, Nachegea & Alberton 2011:11).

Drug shortages pose serious challenge for health care institutions, often interfering with patient care. A common practice during a drug shortage is to select an alternate therapeutic, however, these agents often present challenges and may create safety concerns. Patients harm including adverse events and medication error may occur. Patients may file complaints because of drug shortages (McLaughlin, Kotis, Thomson, Harrison, Fennessy, Postelnick & Scheetz 2013:783).

According to Menees, Vargo, Bonta, Mayo and Jacobson (2013:641) drug shortage has become unexpected reality for hospitals and physicians in the United States. Between 2005 and 2011, the number of drugs in short supply has quadrupled from 52 to 219, reaching crisis mode in 2010. In a nationwide survey, Menees et al (2013:641) found that a large percentage of gastroenterology practices have experienced significant shortages in drugs used for sedation during endoscopic procedures and to manage gastrointestinal bleeding.

The comprehensive provision of quality health care services and the reduction of health inequalities are major priorities and objectives of the member countries of the Organization for Economic Cooperation and Development. Even in developed countries, however, many regions face serious challenges in achieving comprehensive health care delivery in rural areas. Particularly in the face of an aging population, the need for both general and specialised health care services has steadily increased. Nevertheless, the supply of health care services in rural regions is declining for a multitude of interrelated reasons (Weinhold & Gurtner 2014:201).

1.3 RESEARCH PROBLEM

Problem statement expresses the dilemma or troubling situation that needs investigation and that provides rationale for a new inquiry (Polit & Beck 2012:82). While doing clinical accompaniment in one of the hospitals, the researcher discovered that there were no sterile packs, no urinary catheters, patients were catheterised with intravenous lines. Despite shortage of resources, health professionals are expected to provide quality patient care. The work environment in which nurses provide care to patients can determine the quality and safety of patient care (Hughes 2008:27). This was asserted by Nkomo (2013:52) who raised the notion of procurement of essential drugs and equipment within the hospital as a problem that affect the current health system.

New strategies need to be identified to reduce shortage of resources in public hospitals. Where care falls short of standards, whether because of resource allocation or lack of appropriate policies and standards, nurses shoulder much responsibility as their commitment to the profession (Hughes 2008:25). DENOSA held its second National Executive Committee meeting where they expressed their continuation of serious adverse events at the country's institutions. The death of babies in one of the hospitals in Limpopo province due to low nursing staff levels and faulty machinery, is a reflection of poor planning by management in allocating resources (Delihlazo 2014:41).

1.4 AIM OF THE STUDY

The research purpose and objectives that guided the study are discussed.

1.4.1 Research purpose

The research purpose is a clear, concise statement of the specific goal or focus of a study (Burns & Grove 2011:146).

The purpose of this study is to describe and explore the perceptions of professional nurses on the impact of shortage of resources on quality patient care in one of the public hospitals in the Capricorn District in Limpopo Province.

1.4.2 Research objectives

Research objective denotes the more concrete, measurable and more speedily attainable conception of such a plan to do or achieve. (De Vos, Strydom, Fouché & Delpont 2012:94).

In this study the research objectives were to:

- Describe the perceptions of the professional nurses on impact of shortage of resources on patient care.
- Describe how material and physical resources affect professional nurses' ability to provide patient care.

1.4.3 Research question

Research questions are in some cases, direct rewording of statement purpose, phrased interrogatively rather than declaration (Polit & Beck 2012:80).

In this study research questions were:

- What are the perceptions of professional nurses on impact of shortage of resources for quality patient care?
- How do material and physical resources affect your ability to provide patient care?

1.5 SIGNIFICANCE OF THE STUDY

According to Burns and Grove (2011:410), significant of the study is associated with its importance in contributing to nursing's body of knowledge.

- The Department of Health might save money because patients will be provided with quality care and length of stay in the hospitals will be reduced.
- The professionals will provide quality patient care and professional image might be restored.
- The procurement of goods might be done according to the procurement policy.

1.6 DEFINITION OF KEY CONCEPTS

- Perceptions –the reception of conscious impression through the senses by which we distinguish objects from another and recognise their qualities according to the different sensations they produce (Freshwater & Maslin-Prothero 2012:444). In this study perceptions are how professional nurses understand the impact of shortage of resources has on provision of quality care.
- Impact – changes brought about by an intervention (Reimold & Koeberl, 2014: 59). In this study impact are the result shortage of resources has on provision of quality care.
- Resources – are things the earth provides that people need and use, such as energy, water and raw materials for making things (Spilsbury & Spilsbury 2006:6).

In this study resources are both human and materials used to monitor, diagnose and treat people who are sick.

- Professional nurse – is a person who is qualified and competent to independently practice comprehensive nursing in a manner and to the level prescribed and who is capable of assuming responsibility and accountability for such practice (South Africa 2005:25). In this study, professional nurses are nurses who have a diploma or degree in general nursing science and midwifery and are registered with the South African Nursing Council.
- Care – it represents the nurturing components and is exclusive to nursing. Nurturing involves using the factors that make up the concept of mothering and provide for teaching- learning activities (George 2010:182).
- Quality refers to the characteristics of and pursuit of excellence (Huber 2008:828).
- Quality patient care – refers to the degree to which health services for patients increase the likelihood of desired health outcomes (Huber 2008:829). In this study quality care is the standard of care provided to someone who is physically or mentally ill.

1.7 FOUNDATION OF THE STUDY

Framework is the overall conceptual underpinnings of the study (Polit & Beck 2012:128). Not every study is based on formal theory or conceptual model, but every study has a framework (Polit & Beck 2012:128). The researcher conducted a literature review and adopted Donabedian's Health care quality model.

A model is frequently described as a symbolic depiction of reality. It provides a schematic representation of certain relationships among phenomena, and it uses symbols or diagrams to represent an idea (Brink *et al* 2012:26).

1.7.1 Research paradigm

Paradigm is a way of looking at natural phenomena – a world view that encompasses a set of philosophical assumptions and that guides one's approach to inquiry (Polit & Beck 2012:736). The naturalistic paradigm guided the study.

For a naturalistic inquirer, reality is not a fixed entity but rather is a construction of the individuals participating in the research: reality exists within a context, and many constructions are possible (Polit & Beck 2012:11).

Qualitative research is naturalistic in nature, for it studies attitudes and behavior within their natural setting as opposed to an artificial setting (Babbie & Mouton 2011:270). The study was conducted in the hospital and different units such as medical and surgical units where professional nurses were allocated. The study was conducted during working hours, but without disturbing any routine work.

1.7.2 Research approach

A qualitative research design was used in this study.

Qualitative research design is a systemic, subjective approach used to describe life experiences and give them significance. The approach allows the researcher to explore the depth, richness and complexity of the phenomenon (Burns & Grove 2011:59). In qualitative design the researcher has an opportunity to interact with the participants in the environment. In this study the participants were free to express their views and experience about the effects of resources on quality patient care.

According to Brink, Van der Walt and Van Rensburg (2012:121) the purpose of qualitative research is in-depth description and understanding of people's beliefs, action and events in all their complexity. Professional nurses who provide care to the patient have an in-depth knowledge regarding the effects shortage of resources have on patient care.

Qualitative research is a means of exploring and understanding the meaning of human problem. The process of research involves emerging questions and procedures: collecting data in the participants setting (Creswell 2014:246) and Hansen (2006:4) define qualitative research as a systematic and subjective approach used to describe life experiences and give them meaning. Burns and Grove (2011:61) indicate that in qualitative research people are studied in their natural setting in order to discover the social world of cultures and languages by living with them and observation and talking to them and can be able to identify the characteristics and significance of human experiences as described by participants and interpreted by researcher.

1.7.3 Donabedian Health Care Quality Model



Figure 1.1 Donabedian Health Care Quality Model

(www.qualitydigest.com)

The researcher was guided by Donabedian 's framework and the scope was limited to the qualitative approach as the naturalistic paradigm. Donabedian created a framework for outcomes research, he emphasises on three factors: structure, processes and outcomes (Polit & Beck 2012:263).

The structure of care refers to a broad organisational and administrative features and can be appraised in such attributes as size, ranges of services, technology, organisational structure, and organisational climate (Polit & Beck 2012:263). In this study the structures are hospital beds, X-ray machines, ventilators and other resources that are used to diagnose, treat and rehabilitate patients.

Processes are procedures that are carried out in the hospital like early diagnosis, initiation of treatment and rehabilitation of patients.

Outcomes include the results of patient care example reduced patient stay in the hospital, reduced mortality rate and prevention of complications.

1.7.4 Research design

Research design is the overall plan for obtaining answers to the research question. (Polit & Beck 2012:58). In this study the researcher used qualitative descriptive exploratory design. Description is more likely to refer to a more intensive examination of a phenomena and their deeper meaning, thus leading to thicker description (De Vos et al 2012:96).

- **Descriptive design**

According to Burns and Grove (2011:256), the descriptive study is designed to gain more information about the characteristics within a particular field of study. Its purpose is to provide a picture of a situation as it naturally happens. In this study the researcher obtained in-depth rich information from professional nurses.

- **Exploratory design**

Exploratory design is a means to understand and gain insight into a situation, community, individual or phenomena under study (De Vos et al 2012:95). Exploratory design was used to gain insight and understanding of the phenomena under study.

1.8 RESEARCH METHOD

The population, sample, sampling technique and the interview guide will be discussed under this subsection. A detailed information will be discussed in chapter 3.

1.8.1 Population and sample selection

Population is the entire aggregation of cases in which researcher is interested (Polit & Beck 2012:273). In this study, targeted population are professional nurses working in surgical and medical wards who are providing care to patients in a targeted hospital. According to Burns and Grove (2011:290), accessible population is the portion of the target population to which the researcher has reasonable access. In this study, accessible population were professional nurses in surgical and medical wards who have five or more years' experience in the hospital.

- **Research setting**

Research setting refers to location in which the study is conducted (Burns & Grove 2011:40). The study was conducted in surgical and medical wards in Mankweng hospital: Capricorn district in Limpopo province.

- **Sample and sampling technique**

In this study, non-probability sampling was used. The elements were selected by non-random method which means that there is no way of estimating the probability that each element has on being included in the sample. Purposive and convenient sampling strategies were used to select professional nurses from surgical and medical wards. Purposive sampling is a method where data is collected from participants chosen because they illustrate some features that are of interest for a particular study (De Vos et al 2012:328).

Convenient sampling is the use of the most readily accessible persons or objects as subjects in a study (LoBiondo-Wood & Haber 2010:226). The researcher consulted nurse manager who gave permission to conduct the study from professional nurses who met the inclusion criteria as follows:

- Professional nurses who have five or more years' experience.
- Professional nurses both male and female who are on duty and willing to participate in the study.
- Professional nurses who are 30 years old or more.

1.8.2 Data collection

According to Polit and Beck (2012:725), data collection is the gathering of information to address a research problem. The researcher used interview guide. According to Polit and Beck (2012:356), unstructured face to face interviews are conversational and interactive and are the mode of choice when researchers do not have clear idea of what it is they do not know. The researcher interviewed people who were most knowledgeable about the study. The researcher allowed the participants to tell their stories. The researcher asked one broad question:

“How does shortage of resources affect provision of quality patient care?” The broad question was followed by probing questions which was guided by participant’s responses. Brink et al (2012:158) explain that unstructured interviews will produce more in-depth information on the participant’s beliefs and attitudes than can be obtained through any other data gathering procedure.

1.8.2.1 Data collection process

The researcher approached professional nurses allocated in surgical and medical wards. An information document was read to all (Annexures F and G), who were willing to participate in the study, the researcher physically interviewed the participants in a private room so as to maintain privacy; confidentiality was maintained by not using the participant’s real names and field notes and audio tapes was kept safely. The researcher used audio tape to record the participant’s responses. Field notes were also used.

1.8.2.2 Data analysis

According to Polit and Beck (2012:556), the purpose of data analysis is to organise, provide structure to, and elicit meaning from data. Data analysis and collection often occur simultaneously in qualitative studies.

The researcher scrutinised collected data by reading the data over and over in order to understand meaning of collected data. Verbatim transcription of audio taped interviews is very important. Information was categorised into segments and then coded (Polit & Beck 2012:556). Data analysis was guided by Tesch’s six steps method as described by Creswell (2014:97) and is elaborated in chapter 3. These six steps are interrelated:

- Organise and prepare data for analysis which involves transcribing, interviews and scanning.
- Develop a general sense by reading through all the data.
- Code the data by organising the materials and bringing meaning to the information.
- Describe and identify themes
- Represent the findings, use narrative passage to convey the finding into analysis.
- Interpret data.

1.9 TRUSTWORTHINESS

Trustworthiness is the degree of confidence qualitative researchers have in their data, assessed using the criteria of credibility, transferability, dependability, conformability and authenticity (Polit & Beck 2012:745).

The method of ensuring trustworthiness was adopted from Lincoln and Guba (1985:290-294) and Brink et al (2012:172).

- **Credibility**

A criterion for evaluating integrity and quality in qualitative studies, referring to confidence in the truth of the data (Polit & Beck 2012:524). In this study credibility was ensured by:

- Writing notes while recording the information in order to ensure that data is correct.
- Performing member check by consulting with participants with the results for confirmation (Brink et al 2012:172). The participants were asked about their responses during the data collection and also at the end when data has been collected and analysed to confirm if their responses were interpreted correctly.

- **Dependability**

According to Brink et al (2012:172), dependability is the provision of evidence such that if it were repeated with the same or similar participants in the same or similar context, its findings would be similar.

- **Conformability and authenticity**

The data must reflect the voice of the participants and not the researcher's biases or perception (Brink et al 2012:173). In this study the researcher documented the procedure check and recheck the data throughout the study.

Authenticity refers to the extent to which the researcher fairly and faithfully shows a range of different realities (Botma, Greeff, Mulaudzi & Wright 2010:234).

- **Transferability**

The ability to apply the findings in other contexts or to other participants (Brink et al 2012:173). In this study transferability was ensured by thoroughly describing the research context and the assumptions that were central to research.

1.10 ETHICAL CONSIDERATIONS

The researcher must ensure that the research that is being conducted not harmful to participants. Insensitive and intrusive questions that may undermine the participant's autonomy must be avoided (Botma, Greeff, Mulaudzi & Wright 2010:56).

According to Polit and Beck (2012:327), ethics is a system of moral values that is concerned with degree to which research procedures adhere to professional, legal and social obligations to the study participants.

Permission to conduct a study was obtained from Ethical Committee of University of South Africa (Annexure A), Department of Health Research Committee Limpopo Province (Annexure C), The Executive Officer of the hospital (Annexure E), nurse manager of the hospital, operational managers of the units where the study was to be conducted and participants.

The following principles are based on the human rights that need to be protected in this study.

The principle of respect for persons

Individuals are autonomous: The individual has the right to decide whether to participate in the study without risk of penalty, she/he can withdraw from the study at any time.

The principle of autonomy

The principle of autonomy means that the clients can expect the researcher to provide them with information in such a way that they can understand it and make a decision based on the information received (Mellish& Paton 2003:122).

The principle of beneficence

The participants have the right to protection from harm and discomfort. The participants should not be exposed to harmful intervention.

The principle of justice

The principle of justice refers to the participants' right to fair selection and treatment (Brink et al 2012:36). Selection of participants should be fair and participants' right to privacy should be respected. Information collected should remain confidential and anonymity should be maintained.

The right to self-determination.

According to Polit and Beck (2012:154), humans should be treated as autonomous agent, capable of controlling their action. In this study the researcher will give participants adequate information and allow them to ask questions so that they can decide whether to participate in the study or not.

The participant has the right to refuse to give information or to withdraw from the study.

1.11 SCOPE OF THE STUDY

The study was conducted in one hospital around Polokwane municipality; the non-probability sampling approach may not equally represent the population to whom the results may be transferred. The tight schedule of the participants limited the time for interview due to shortage of staff and the researcher scheduled the time for interviews very carefully.

The study was conducted in one hospital the results cannot be generalised to other hospitals in the province.

1.12 STRUCTURE OF THE DISSERTATION

Chapter 1: This chapter forms the basis of the study. It describes the background and the research problem, explains the research objectives and defines the main concepts of the study. It also indicates the research purpose and includes the exposition of the research programme

Chapter 2: This chapter provides the literature review on perceptions of professional nurses on impact of shortage of resources for quality patient care.

Chapter 3: This chapter outlines the research methodology and data collection.

Chapter 4: This chapter presents data analysis, results and the discussion.

Chapter 5: This chapter presents the summary, conclusion, limitations and recommendations.

1.13 CONCLUSION

A qualitative descriptive exploratory design was used which focused in exploring the impact shortage of resources has on patients' care. The population in this study was all professional nurses who are providing patient care.

Data was collected by unstructured interview to gain a detailed picture of participant's belief about, or perception or account of a particular topic. Field notes and audiotape were used.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

A thorough literature review provides a foundation on which to base new evidence and usually is conducted before data are collected (Polit & Beck 2012:58).

In this chapter an intensive literature search was done from the following data bases: Sabinet, Google scholar, Science direct and Ebscohost.

According to Brink et al (2012:71), the researcher conducts literature review for various reasons:

- To conduct a critical analytical appraisal of recent scholarly works on the topic. By determining what is already known about the topic, the researcher can obtain a comprehensive picture of the state of knowledge.
- To identify the research problem and refine the research questions.
- To place the study in the context of the general body of knowledge, which minimises the possibility of unintentional duplication and increases the probability that the study makes a valuable contribution?
- To obtain clues to the methodology and instruments. This aspect provides the researcher with information on what has and has not been attempted with regard to approaches and methods, and on what types of data-collecting instruments exist and work or do not work.
- To refine certain parts of the study, specifically the problem statement, hypothesis, conceptual framework, design and data-analysis process.
- To compare the findings of existing studies with those of the study at hand. This process shows the relevance of the latter findings to the existing body of knowledge.
- To inform or support a qualitative study, especially in conjunction with the collection and analysis of data (Brink et al, 2012:71).

During the literature review process, the researcher focused on both the global and South Africa. In this chapter, the researcher examines literature on health care system, health policies, shortage of health care professionals, equipment and health supplies in the health system and drug shortages.

2.2 THE HEALTH CARE SYSTEM IN SOUTH AFRICA

Health care system is described as a set of goals and elements in interaction to achieve a specific goal (Booyens, Jooste & Sibiyi 2015:8). There are three elements of a system which is input, throughput and output. Input includes factors such as facilities, human resources (and their qualifications, experience, attitude, loyalty, management style and philosophy): equipment and supplies, information, money raw material or clients. Inputs are strongly influenced by the environment within which they function. Throughput pertains to the process by which the system utilises the inputs and converts them into products and services in order to achieve the goals in terms of results. Output is the results of the throughput process utilising inputs from the specific environment. Outputs can be either satisfactory or unsatisfactory in terms of the health care result for the patient. Health Care system is an open system strongly influenced by the environment in which it functions. For example, shortages of funds or human resources have strong influence on the results of patient care delivery.

Like Booyens et al (2015:98), Donabedian's Health Care Quality Model has three factors which are structures, processes and outcomes.

The structure of care refers to a broad organisational and administrative features and can be appraised in such attributes as size, ranges of services, technology, organisational structure, and organisational climate (Polit & Beck 2012:263). In this study the structures are hospital beds, X-ray machines, ventilators and other resources that are used to diagnose, treat and rehabilitate patients.

Processes are procedures that are carried out in the hospital like early diagnosis, initiation of treatment and rehabilitation of patients. Outcomes include the results of patient care example reduced patient stay in the hospital, reduced mortality rate and prevention of complications.

The desire to improve on health systems and health care delivery is common in many low and middle income countries. However, the resources required to drive the quality agenda and the sustainability of quality interventions have encountered major challenges. The requisite knowledge about quality approaches and their implementation are often lacking among health personnel. Therefore, health care quality improvement often remains more of verbal expression rather than a reality in such settings (Agyeman-Duah et al 2014:6).

The performance of South Africa's health system since 1994 has been poor, despite good policy and relatively high spending as a proportion of gross domestic product (GDP) services are fragmented between public and private sectors. The public sector serves 83% (41.7 million) of the population and the private sector 17% (8.3 million). Imbalances in spending between the public and private sector have skewed the distribution services, which has been detrimental to both sectors. The inability to get primary health care and the strict health system to function effectively has contributed to the failure of health system (South Africa 2011b).

2.2.1 The public sector

According to Bloland, Simone, Burkholder, Slutsker and De Cock (2012:2), the World Health Organization defines health systems as all organisations, people, and actions whose primary intent is to promote, restore, or maintain health. Key concepts within health systems strengthening include capacity building (within both the public and private sectors). Sustainability, equity, effectiveness, and efficiency. Public health is a critical part of the larger concept of health systems and has been defined as “what we as society collectively assure the conditions in which people can be healthy” (Bloland, Simone, Burkholder, Slutsker & De Cock (2012:2).

The goal of public health is to improve health outcomes for populations through the achievement of the objectives of preventing diseases and the health consequences of environmental hazards and natural or man-made disasters, promoting behaviors that reduce the risk of communicable and non-communicable diseases and injuries, and ensuring the public's access to quality health services (Bloland et al 2012:1).

The public health care sector continues to bleed significantly from the health care personnel that are trained by the government and then join the private health care sector (South Africa 2016).

2.2.2 Training of nurses in the public sector

The South African Nursing Council (SANC) shall, by administrative rules and regulations, set standards for the establishment and outcome of nursing education and training programmes, including clinical leading programme and approve such programmes that meet the requirement of the Nursing Act (South Africa 2005). As the regulator of nurses and midwives in South Africa.

The mission of the SANC is to safeguard the health and wellbeing of the public, maintain a register of nurses and midwives, set and maintain standard of education, training and practice, ensure that nurses and midwives keep their skills and knowledge up to date, and uphold the standard of their profession and provide mandatory guidance and additional advice to people designing and developing education programme (nursing education and training standards) (SANC 2012).

In Limpopo Province, nurses are trained in Limpopo College of Nursing which offers both basic and post basic nursing education programs namely: Four-year basic diploma under R425 relating to approval of the minimum requirement for Education and Training of a nurse (general, psychiatric, community) and midwifery (SANC 2005). It also offers post basic courses in clinical nursing science leading to registration of additional qualification R212 of 19 February 1993 (SANC 1985).

2.2.3 Financing the health system

In 2005, World Health Assembly passed a resolution on sustainable health financing, universal coverage and social health insurance. The resolution noted a wide mix of financing mechanism across countries, but asked countries to commit to progressively extending a pre-payments system. This measure was aimed at increasing security of services, protecting against financial risk, preventing catastrophic health expenditure and moving towards universal system.

South Africa has a transitional or pluralists health system, consisting of tax funded health system for the majority and a system of medical schemes for relatively small proportion of the population (South Africa 2011b:307).

In South Africa health care expenditure is derived from three main sources, public sector expenditures financed out of general revenue. National Health Insurance will provide coverage to the whole population and minimise the burden carried by individuals of directly out of pocket for health care services (South Africa 2011b:5).

2.2.4 Quality of health care

Quality health care is always linked to patient safety. The Institute of Medicine described quality as the degree to which health services for individuals and populations increase the desired health outcomes which are further linked to quality indicators or standards (Mitchell 2008:2).

Significant improvement in health services coverage and access since 1994 have been achieved. However, there are still notable quality problems, Among the commonly cited and experienced by public are cleanliness, safety and security of staff and patients, long waiting times, staff attitudes, infection control and drug stock-outs. Given that there are concerns about quality at public sector facilities, there is preference by the public for services in private sector which may be largely be funded out of pockets. Various members of the public cannot afford to make these payments. This type of arrangements is not suitable for the country's level of development. Therefore, improvement of quality in the public health system is at the Centre of health sectors reform endeavors (South Africa 2011b:9).

Health in Malawi, as in other developing countries is hampered by chronic lack of resources, severe human resource deficiencies and inadequate material resources essential for health care. At the same time, expectations are high for both the quality of care and training and supervision, particularly in tertiary hospitals.

Establishing a quality improvement process in resource limited setting is an enormous task, considering the host of challenges that these facilities face.

The steps towards changing status quo for improved quality care required critical self-assessment, the willingness to change as well as determined commitment and contributions from clients, staff and management (Agyeman-Duah et al 2014:8).

2.2.5 Private sector

There is an urgent need to review the current Regulation 158 with other overall objectives of optimising the acquisition; operation and management of private health care infrastructure through all stages of infrastructure lifecycle. Access and affordability are the key issues in the context of the private health care sectors. Cost escalation are rendering private health care increasingly unaffordable to the majority of the Limpopo population (South Africa 2016).

As a young democracy, South Africa faces the challenge of finding a balance between developed and lesser developed health systems to provide quality health care for all citizens. Private hospitals in South Africa are part of international hospital systems, attesting to their success at achieving international standards of quality in health care (Coetzee, Klopper, Ellis & Aiken 2013:163).

2.2.5.1 *Training of nurses in private sectors*

The South African nursing workforce consists of four broad categories of nurses. Private nursing education institutions (NEIs) can offer certificates (first two years of study) or diplomas (four years of study). After completion of the first year, nurses (licensed or enrolled as auxiliary nurses) they can perform basic nursing care. After completion of second year of study (licensed or enrolled as enrolled nurses ENS, they can render more specialised basic nursing care. Third and fourth year diploma students, registered students at nursing colleges (four-year integrated diploma or two-year bridging course to registered nurses) can practice as student nurses and perform tasks under the scope of practice of the registered professional nurses, but under supervision, until completion of their qualification (Lubbe & Roets 2014:59).

2.2.5.2 *Financing the private health system.*

A larger part of the financial and human resources for health is located in the private sector which is covering a minority of population.

Medical schemes are the major purchasers of services in private sector which covers 16.2% of the population. In South Africa expenditure is financed through medical schemes and out of pocket payments (South Africa 2011b:5).

2.3 HEALTH POLICIES

Everyone has the right to have access to health care services, including reproductive health care; the state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of this right (Act 108 of 1996, section 27) (South Africa 1996). The Department of Health (DOH) developed policies to ensure provision of quality patient care. Prior to the 1994 democratic breakthrough South Africa had a fragmented health system designed along racial lines. One system was highly resourced and benefited the white minority. The other one was systematically under resourced and was for the black majority. The constitution has outlawed any form of racial discrimination and guarantees the principle of socioeconomic right including the right to health. An attempt to deal with these disparities and integrate the fragmented services that resulted from fourteen health departments did not fully address the inequities. In order to address the inequities South Africa is in the process of introducing an innovative system of health financing with far reaching consequences on the health of South Africans (South Africa 2011b:5).

Sustainable development goals (SDGs) are a planned set of objectives relating to upcoming international development built on the MDGs and are aimed at ending extreme poverty in all its forms. Set to replace millenium developmental goals (MDGs) after 2015, SDGs are universal and apply to national and local governments. SGD3 is aiming at ensuring healthy lives and promotes well-being for all ages (Vasuthevan & Mthembu 2016:247).

2.3.1 National health insurance

The National Health Insurance (NHI) is intended to bring about reform that improves service provision. It will promote equity and efficiency so as to ensure that all South Africans have access to affordable, quality health care services regardless of their socio-economic status (South Africa 2011a). The South African health system is inequitable, with the privileged few having disproportionate access to health sector.

There is recognition that system is either rational or fair. Therefore, NHI is intended to ensure that all South African citizens and legal residents financing on an equitable and sustainable basis (South Africa 2011a:5). NHI is a financing system that will ensure that all citizens of South Africa and legal residents are provided with essential health care regardless of their employment status and ability to make a direct monetary contribution to the NHI fund (Ogunbanjo 2014:301).

The purpose for NHI is to improve and promote people's health, to protect them against the financial costs of illness by reducing out of pocket spending and to achieve some form of universal coverage (Shisana, Rehle, Louw, Zungu-Dirwayi & Rispel 2006:814).

The principles that will guide the national health insurance are the following:

- The right of access to health care services.
- Social solidarity – the creation of financial risk protection for all, and subsidisation between rich and poor, healthy and sick.
- Effectiveness – better performance of the health care system, contributing to positive health outcomes and value for money.
- Appropriateness – new and innovative health service delivery models tailored to respond to local needs.
- Equity – those with the greatest health needs are provided with access to services without barriers, and inequalities are minimised.
- Affordability – services will be procured at reasonable costs.
- Efficiency of administrative structures to minimise or eliminate duplication across all spheres. Minimal resources to be spent on the administrative structures of the NHI and value for money achieved (Shisana et al 2006).

According to Amado, Christofides, Pieters and Rusch (2012:8), the implementation of NHI in South Africa is a noble attempt to address the inequities and scarcity of health care in the country. Its success is threatened by mismanagement of resources, corruption and poor quality institutions. Inequalities in the health system go well beyond the health sector usage burden to sector related challenges that prevent access to health service delivery. In this instance equity is compromised and the provision of health care is limited, having implications on access needed (Mack 2011:45).

The outcome of inequity in access to care is that there are many missed opportunities for early prevention and care, hence the NHI is designed to offer social protection in health so that no one will suffer financial burden because of illness (Shisana et al 2006:818).

2.3.2 Primary health care

Primary health care approach is centred on the individual, the family and the community (South Africa 2011b:59). The ideal health service should be accessible, affordable, acceptable, available, equal, effective, efficient, continuous, caring, comprehensive, comfortable considerate scientifically advanced and careful with patient's safety (Hattingh, Dreyer, Roos & Peu 2012:73).

The core of the primary health care outreach team will need professional nurses, staff nurses and community health workers. This will require substantially increased number of trained nurses and significant strengthening of their skills to carry out and support primary health care. Because primary health care includes promotive and preventive components, the key activities of public health, these nurses will need to be substantially competent in public health. Indeed, in several countries, community nurses lead many aspect of district health care (South Africa 2011b:317).

2.4 SHORTAGE OF HEALTH CARE PROFESSIONALS

The WHO estimates a shortage of almost 43 million physicians, midwives, nurses and other health care professionals. A global undersupply of these threatens the quality and sustainability of health system worldwide. This undersupply is concurrent with globalization and the resulting liberalization of markets, which allow health workers to offer their services in countries other than those of origin (Aluttis, Bishaw & Frank 2014:10)

In Ethiopia, even if the health services organisation and management is decentralised, there are still a shortage of health professionals in different discipline. This has a great deal of undesirable impact on efficiency and effectiveness of the health of delivery services. High turnover is one of the major factors contributing to shortage of health workers. In Ethiopia 20% of health workers quitted from public hospitals and health centers and the first reason for high attrition rate was low salary (Negussie 2013:107). Health care workers are the core members of the front- line and referral health teams in South Africa, assisted by the rehabilitative professional therapists in the health care (Booyens et al 2015:250).

The mobility of human resources across borders has created many opportunities for new employment possibilities. South Africa has a dire shortage of all categories of health care professionals, especially doctors, but also dentists, nurses, physiotherapists, occupational therapists and paramedics. South Africa has shortage of 80,000 health care professionals posing serious challenges for delivery of quality health care in the public sector. This has led to the development of new categories of health care professionals, such as clinical associates (Booyens et al 2015:28).

Health personnel in a hospital setting work as a team, other health care personnel shortage affect both nurses and patients negatively. According to Larson (2006:1), the shortage of pharmacists makes it hard for nurses to deliver care. When there aren't enough pharmacists to go around, the delivery of medication can slow down. Without an adequate number of pharmacists to handle a hospital's needs, nurses may find themselves waiting longer to obtain and administer medications to their patients. She further explains that nurses may have to pick up slacks by doing more support tasks when other personnel are not available. This can slow down the delivery of patient care and it may contribute to the already growing dissatisfaction that many nurses are expressing over their work conditions (Larson 2006:1).

According to Mavalankar, Callahan, Sriram, Singh and Desai (2009:286), the lack of anesthesia providers in rural public sector hospitals is a significant barrier to providing emergency obstetric care. Maternal mortality in India remains high at between 301 and 450 deaths per 100,000 live birth. Anesthesia is an essential component of provision of comprehensive Emergency obstetric care.

However, the availability of anesthesiologists has been a significant challenge for health system in low-income countries, including India.

Department of Health report clearly identifies shortage of health personnel in the public and private sector as key challenges for the South African health sector. It further alludes to inequitable distribution between urban and rural areas, as important in considering skills shortages.

There is a disparity in the distributions of health personnel, driven by differences in service conditions between the public and private sector. The issue is linked to funding of health as there are further difficulties in planning for human resource development because of PERSAL system in the public sector, the health council registration system in the private sector are not providing accurate statistics. The commission proposes a number of actions to overcome the human resource challenges at different levels of Health System (South Africa 2011b:315).

2.4.1 Factors contributing to shortage of health professionals

According to Wildschut and Mqolozana (2008:7) shortage of nurses exist, the overall production of nurses in South Africa over the past nine years is of major concern and is not even keeping up with the increase in population growth let alone providing the health system with additional nurses to cope with new demands and the effects of the HIV epidemic.

According to Booyens and Bezuidenhout (2014:239) shortage of staff can be due to the following:

- Retirement. A person reaches the set retirement age of the institution and has no option but to retire.
- Resignation may occur at any time, several reasons give rise to staff members resigning, it could be that the mother want to look after their babies or young children at home or an employee might resign because her/his spouse is transferred to another city.
- Need for new challenges or experience a high measure of job dissatisfaction.
- Better job offers in terms of more money and or better fringe benefit.

According to Chikudu (2016:60), nursing profession currently suffers a world-wide severe shortage. Turnover of professional nurses remains a big problem for public and private hospitals globally and South Africa is not exempt from this challenge. She further explains that the main reason for staff turnover is financial freedom; most nurses are battling to cope financially. Most nurses are in debt and are forced to work overtime shift to compensate for their already strained salaries.

There is such a huge and unfair disparity in the salaries earned by people with the same qualifications and job experience working for different hospitals. Most nurses' leave because of high levels of crime, a nurse was assaulted and killed by mental patient in Limpopo. Nobody wants to work under unsafe working conditions. Poor working conditions are another reason why nurses leave their current jobs to work at other institutions. The long and inconvenient working hours make it difficult for nurses to stay passionate and motivated in their jobs (Chikudu 2016:60).

2.4.2 Retaining and attracting nurses in the workplace.

Nurses can be retained in the workplace by researching thoroughly on what nurses want and try to meet their demands, or at least halfway, hiring first and foremost talent, people with passion and those unteachable qualities vital to successful nursing and worry about helping them to acquire teachable skills later, selecting and promoting nurse managers from the current employees will help in motivating and inspiring the selected personnel and the other employees in the organisation, staff development which is maximising the strengths of each individual and helping them to identify and develop their talents and skills, engaging staff in formulating policies and decision making, increase wages, benefits and probably introduce hiring and retaining bonuses, financial support towards education and training staff will also help in retaining and attracting new personnel and reducing the salary gaps between organisations (Chiduku 2016:61).

In the health care industry, the challenges to retain professional nurses is ongoing because of global nursing shortage and factors that are related to the health care environment, these include working hours, increased workload, poor salaries and working conditions, which make retention efforts more challenging than in other industries. Health authorities are faced with challenge to come up with strategies, policies and legislation that will direct the recruitment and retention of nurses.

The high cost that comes with turnover has highlighted the need for organisations to make retention of staff their number one priority, retention entails preventing people from leaving an organisation to work elsewhere. This is not an easy task. It requires organisations and management to give attention to employee market and understand what people are seeking from work environment in order to retain them. Organisations will need to identify the reasons why employees leave, and address them (Mokoka, Oosthuizen & Ehlers 2010:2).

2.5 EQUIPMENT AND SUPPLIES IN THE HEALTH SYSTEM

According to Booyens et al (2015:129), the physical environment in which health care is rendered has an effect on the patients, health care professionals, equipment and supplies. Any obstacle that prevents health care professionals from practicing effectively should be eliminated. The physical environment in which care is rendered is just as important for cost-effective care as the quality of the care itself. Facilities should therefore be kept in good condition. Paintwork should receive attention at regular intervals. Dust, temperature, humidity and dirt are variables affecting the environment, which in turn, has an influence on the equipment and supplies used in the unit. She further explains that equipment comprises a large portion of a health service's budget. Quality care can only be rendered if there is sufficient equipment of high quality to meet the needs of the patients and to improve the health workers' productivity.

2.5.1 Equipment maintenance

Availability and maintenance of equipment is regarded as one of the requirements for good quality patient care. According to Aveling, Kayong, Nega and Dixon-Woods (2015:3) impact of resource constraints in low income countries affect quality patient care. The health care workers identified obstacles to patient safety as unavailability of material context and poor staffing.

In order to mitigate the circumstances professional nurses are faced with, Booyens et al (2015:108) suggested the following:

- Equipment must be used for purpose that it was intended for.

- When agency nursing personnel are utilised, the health services manager must ensure that they are also taught how to use the equipment properly.
- If personnel are not taught how to use equipment properly, they tend to improvise, which can lead to inefficient and dangerous practice.
- The equipment must be kept clean; this is essential for rendering safe care.
- Equipment should be cleaned according to the instructions supplied, as non-compliance can contribute to the problem of cross-infection.
- In some cases, it may be necessary for equipment to undergo special cleaning methods, which requires specific department specializing in cleaning equipment after use.
- The equipment must be maintained so that it is ready for use and in the right place.

2.5.2 Drug shortages

According to Griffith, Pentoney and Scheetz (2012:665), drug shortage has become unexpected reality for hospitals and physicians in the United States. Between 2005 and 2011, the number of drugs in short supply has quadrupled from 52 to 219, reaching crisis mode in 2010. In a nationwide survey, we found that a large percentage of gastroenterology practices have experienced significant shortages in drugs used for sedation during endoscopic procedures and to manage gastrointestinal bleeding.

According to McLaughlin, Pentoney, Skoglund and Scheetz (2014: 2074), drug shortage pose a serious challenge for health care institutions, often interfering with patient care. A common practice during drug shortage is to select an alternate therapeutic; however, these agents often present challenges and may create safety concerns. Patient harms including adverse events and medication errors may occur. Patients may also file complaints because of drug shortages. He further explains that institutions across the United States are experiencing patient harms that are attributed to drug shortages. These patient harms include medication errors or near misses, adverse events, cancelled care, and delayed care. In some cases, alternate medications may not exist and may lead to poor patient outcomes.

The shortage of medications and other biomedical products has significantly affected patient care over the last decades. Medication shortage can pose only minor disruption in health care when medication has limited indications and there are suitable therapeutic alternative available, but it may have significant impact on public health for medications such as vaccines or when there are no therapeutic alternatives (De Oliveira, Theilken & McCarthy 2011:1429).

The National Health Department is urgently trying to source and install a countrywide computer software system that will link health care facilities with drug depots and suppliers in order to relieve ongoing essential drugs stock-out which threatens the lives of thousands of patients. The issue has become a national crisis in 8 of the 9 provinces. Contributing factors include a shortage of pharmacists, protracted labour disputes, dismissal management, corruption, and woeful communication between suppliers, depots and facilities. Contributing factors include a shortage of pharmacists, protracted labour disputes, dismal management, corruption, and woeful communication between suppliers, depots and facilities (Bateman 2013:600).

In United States of America drug shortages influenced all stakeholders, in the supply chain, especially patients and hospitals which has raised public concerns. Drug shortage for patients can lead to suboptimal care and delays or cancellation of treatment or surgery. Patient may also experience medication errors, adverse outcomes, and increased health care costs (Yang, Wu, Cal, Zhu, Shen & Fung 2016: 10).

The rapid growth of South Africa's anti-retro viral programme, which is the largest in the world, is said to have produced serious challenges for the public health system. During September and October 2013, the Stock-Outs Project conducted interviews with personnel at 2139 of the 3826 public sectors that provide HIV treatment. The report describes stock-outs of ARVs as a "national crisis" but also reports on shortage of vaccines and TB medications. At the SA Pharmacy Council conference in June 2013, the Minister of Health urged pharmacists to address stock-out as a matter of extreme urgency (Patel 2013:46).

The number of drug shortages has increased over the past decade, and drug shortages may now be considered a public health emergency.

Anti-infective medications are irreplaceable lifesaving therapies that, as a class, comprise approximately 14% of all shortages, second only to the therapeutic classes encompassing anesthetics and central nervous system drugs.

Northwestern Memorial Hospital experienced shortages of 10 drugs for which mitigating action needed to be taken. In an effort to mitigate the effects of these shortages, the hospital's antimicrobial stewardship team restricted the use of certain agents, while alternative agents were recommended during drug shortages involving ganciclovir, pentamidine and tobramycin (McLaughlin, et al 2014:2078).

2.6 CONCLUSION

While reviewing literature from other studies, it was revealed that provision of quality patient care is influenced by many things, like availability of health professionals, recruiting and retaining of staff members is very important, availability of medical supplies, availability and maintenance of equipment. After data collection and analysis, the researcher will compare the findings with which is already in the literature in order to draw conclusion.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

In this chapter the researcher discussed research design, population, sampling technique, instrument for data collection, data analysis as well as ethical considerations. Research methodology is the overall plan for addressing a research question, including specifications for enhancing the study's integrity (Polit & Beck 2012:141). Qualitative methods are more appropriate for the researchers who wish to explore the meaning or describe a particular phenomenon (Brink et al 2012: 113).

The study was guided by the following objectives:

- Describe the perceptions of the professional nurses on impact of shortage of resources on patient care.
- Describe how material and physical resources affect professional nurses' ability to provide patient care.

3.2 RESEARCH DESIGN.

Research design is a blueprint for the conduct of a study that maximises control over factors that can interfere with the study's desired outcome (Burns & Grove 2011:49). Research design is the overall plan for obtaining answers to the research question (Polit & Beck 2012:58).

In this study the researcher used qualitative exploratory, descriptive approach which is discovery orientated in nature. It uses words, as opposed to numbers, to explain a phenomenon. Qualitative research lets us see the world through the eyes of the other. Qualitative studies make the world of an individual visible to the rest of us (LoBiondo-Wood & Harber 2010:86). The researcher explored the perceptions of professional nurses on shortage of resources for quality patient care.

Qualitative research design has the following characteristics:

- Often involves merging together various data collection strategies.
- Is flexible, capable of adjusting to new information during the course of data collection.
- Tends to be holistic, striving for an understanding of the whole.
- Requires researchers to become intensely involved.
- Requires researcher to become the research instrument.
- Involves ongoing analysis of the data to formulate subsequent strategies and determine when data collection is done (Polit & Beck 2012:487).

Description is more likely to refer to a more intensive examination of a phenomena and their deeper meaning, thus leading to thicker description (De Vos et al 2012:96).

According to Polit and Beck (2012:505), many qualitative studies claim no particular disciplinary or methodology roots. The researcher may simply indicate that they have conducted qualitative study. Many studies that do not have formal names are referred as descriptive qualitative studies. The study is intended to explore and describe how shortage of resources affects provision of quality patient care.

- **Descriptive design**

According to Burns and Grove (2011:256), the descriptive study is designed to gain more information about the characteristics within a particular field of study. Its purpose is to provide a picture of a situation as it naturally happens. In this study the researcher obtained in-depth rich information from professional nurses who spend most of the time with the patients and experienced the impact of shortage of resources for quality patient care on a daily basis.

- **Exploratory design**

Exploratory design is a means to understand and gain insight into a situation, community, individual or phenomena under study (De Vos et al 2012:95).

Exploratory design was used to gain insight and understanding of the phenomena under study. The design assisted the researcher to ask probing questions based on the interview guide questions.

3.3 RESEARCH METHOD

The population, sample and sampling technique are discussed under this subsection.

3.3.1 Population and sample selection

Population is the entire aggregation of cases in which researcher is interested (Polit & Beck 2012:273). In this study, targeted population is professional nurses working in surgical and medical wards who are providing care to patients in a targeted hospital. The sample are selected professional nurses in surgical and medical wards who have five or more years' experience providing care to patients, who were working on the day of data collection and willing to participate in the study.

According to Burns and Grove (2011:290), accessible population is the portion of the target population to which researcher has reasonable access. In this study, accessible population were professional nurses in surgical and medical wards who have five or more years' experience in the hospital.

3.3.1.1 Research setting

Research setting refers to location in which the study is conducted (Burns & Grove 2011:40). The study was conducted in Limpopo province, Capricorn district Mankweng hospital surgical and medical wards

- ***Size of Limpopo Province***

Limpopo Province is the fifth largest of South Africa's nine provinces covering an area of 125 755 square kilometers, which is 10.3% of South Africa's total land area. It has a population of 5.6 million, is divided into five (5) districts, which in turn divided into twenty-five (25) local municipalities. It has 30 districts, 05 regional, 02 tertiary, 03 specialised hospitals and 14 private health facilities (South Africa 2016).

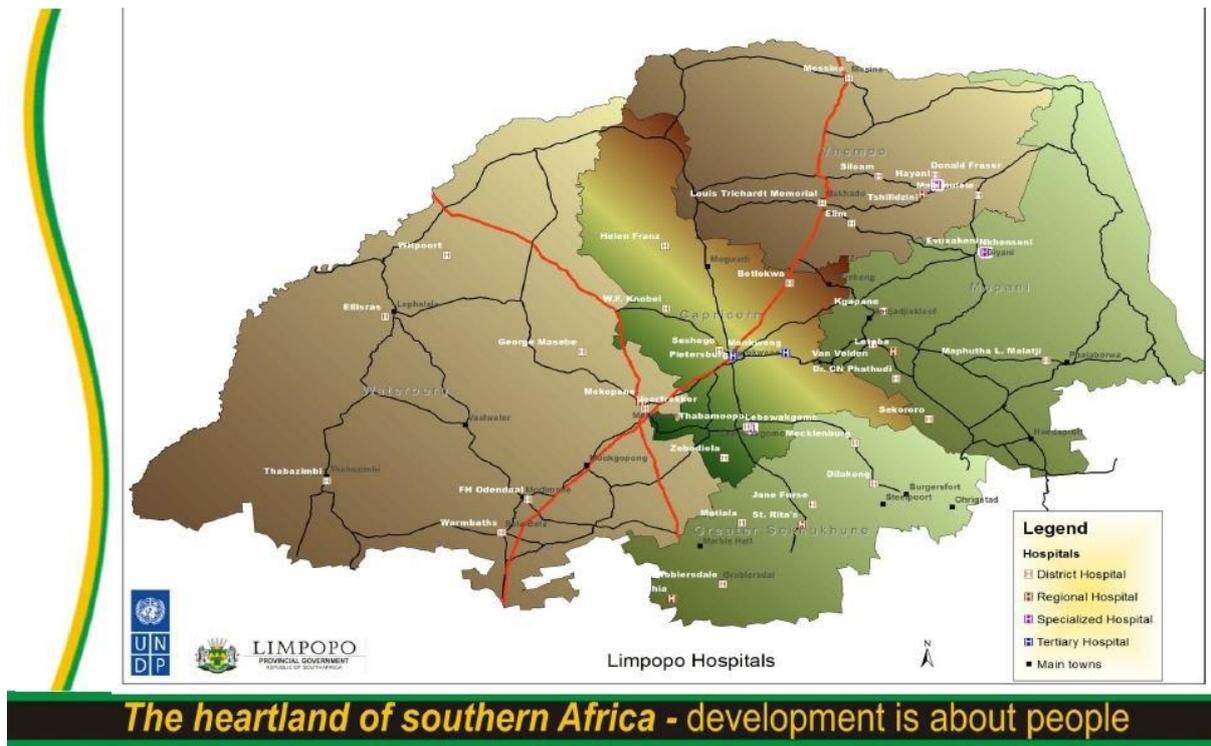


Figure 3.1 Map of the hospitals in Limpopo Province
(South Africa 2016:45)

Mankweng is a tertiary hospital in the Capricorn District, located about 27 km east of Polokwane on the R71 road, has 509 beds, 18 units, providing the follows services:

- Obstetric
- Joint replacement
- Neonatal ICU/Surgery
- Pediatric Intensive care
- Dental
- Reproductive health
- Trauma
- Eye services and clinical laboratory (South Africa 2016:17)

3.3.1.2 Sampling

Sampling refers to the process of selecting a sample from a population in order to obtain information regarding a phenomenon in a way that represents the population of interest (Burns & Grove 2011:281).

Qualitative researcher almost always uses small, nonrandom samples. Participants are not selected randomly; samples tend to be small and studied intensively (Polit & Beck 2012:516).

In this study, non-probability sampling was used, the elements were selected by non-random a method which means that there is no way of estimating the probability that each element has of being included in the sample. Purposive and convenience sampling strategies was used to select professional nurses from surgical and medical wards. Purposive sampling is a method where data is collected from participants chosen because they illustrate some features that are of interest for a particular study (De Vos et al 2012:328).

Convenient sampling is the use of the most readily accessible persons or objects as subjects in a study (LoBiondo-Wood & Haber 2010:226). The researcher consulted Nurse Manager of Mankweng Hospital for a list of all nurses who have more than five years of experience and who are allocated to the surgical and medical wards. In this study the researcher selected professional nurses who are on duty and willing to participate in the study.

- **Inclusion criteria**

Inclusion criteria are the criteria which specify population characteristics (Polit & Beck 2012:274). In this study inclusion criteria are:

- Professional nurses who have five or more years' experience.
- Professional nurses both male and female who were on duty and willing to participate in the study.
- Professional nurses who were 30 years old or more.

- **Exclusion criteria**

Exclusion criteria is the population defined in terms of characteristics that people must not possess (Polit & Beck 2012: 74). In this study exclusion criteria were professional nurses with less than five years' experience in the hospital.

3.3.1.3 Sample

According to Polit and Beck (2012:71), sample is a subset of population that is selected for a particular study, and the members of the study are referred as subjects but the term participants is used to describe the individuals studied in qualitative research (Burns & Grove 2011:51). In this study sample were ten professional nurses, working in surgical and medical ward who have five years' experience providing care to patients. Sample is a subset of population that is selected for a particular study, and the members of the study are referred as subjects but the term participants is used to describe the individuals studied in qualitative research (Burns & Grove 2011:51). Sampling refers to the process of selecting a sample from a population in order to obtain information regarding a phenomenon in a way that represents the population of interest (Burns & Grove 2011:281). According to Polit and Beck (2012:126), sampling is the process of selecting a portion of the population to represent the entire population.

3.3.1.4 Ethical issues related to sampling

When conducting the study, the researcher needs to consider the special needs of vulnerable populations such as minors (under the age of 19) mentally incompetent participants, victims, persons with neurological impairments, pregnant women or fetuses, prisoners, and individuals with AIDS (Creswell 2014:95). In this study the participants were not vulnerable, they were professional nurse who are physically and mentally stable.

In this study the researcher explained the purpose of the research study to the participants (Annexure F) and they all signed the informed consent forms agreeing to participate in the study (Annexure G). The researcher explained how the study will be conducted including the use of audio tape and field notes. They were informed that participation is voluntary and they are not forced to participate and they may withdraw from the study at any time. The researcher adhered to the following ethical principles:

- **The principle of respect for persons**

Individuals are autonomous that is they have the right to self-determination. The individual has the right to decide whether to participate in the study without risk of penalty, she/he can withdraw from the study at any time without penalty (Brink et al 2012: 32). The participants were assured that there is no coercion to participate in the study.

- **The principle of beneficence**

The participants have the right to protection from harm and discomfort. The participants were not exposed to any harmful intervention. There were no risks that were posed to the participants. The interviews were conducted in the comfort of the participants and the probing questions were non-threatening (Brink et al 2012: 33).

- **The principle of justice**

The principle of justice refers to the participants' right to fair selection and treatment (Brink et al 2012:36). Selection of participants should be fair and participant's right to privacy should be respected. The participants were informed that the Information collected will remain confidential and anonymity will be maintained. The inclusion criteria guided selection of participants.

- **The right to self-determination**

According to Polit and Beck (2012:154), humans should be treated with as autonomous agent, capable of controlling their action. In this study the researcher will give participants adequate information and allow them to ask questions so that they can decide whether to participate in the study or not.

The participant has the right to refuse to give information or to withdraw from the study. In this study the researcher obtained permission to conduct the study from the following:

- Ethical committee of University of South Africa (Annexure A).
- Department of Health Research committee (Annexure C).

- The Chief Executive Officer of Mankweng hospital (Annexure E).
- The Nurse Manager of the hospital and the operational managers of medical and surgical wards signed consent before data collection (Annexures F and G).

3.3.2 Data collection

This subsection will discuss the data collection approach, method, characteristics of the data collection instrument, data collection process and the ethical considerations that the researcher adhered to.

3.3.2.1 Data collection approach and method

According to Polit and Beck (2012:75) data collection is the gathering of information to address a research problem. The researcher used the interview guide to collect data. According to Polit and Beck (2012:136), unstructured interviews are conversational and interactive. The researcher interviewed people who are most knowledgeable about the study. The researcher allowed the participants to tell their stories. The researcher asked grand tour question 'How shortage of resources affect provision of quality patient care?' followed by probing questions which was guided by participant's responses. Streubert Speziale and Carpenter (2011: 84) explain that unstructured interviews will produce more in-depth information on the participant's beliefs and attitudes than can be obtained through any other data gathering procedure.

3.3.2.2 Characteristics of the data collection instrument

In qualitative study, the researcher is an instrument for collecting data. According to Creswell (2014:185) the researcher tends to collect data in the field where participants experience the issue or the problem under study. This up-close information gathered by actually talking directly to people and seeing them behave act within their context is a major characteristic of qualitative research.

- Researchers as key instrument in qualitative study collect data themselves through interviewing participants.
- Qualitative researchers build their patterns, themes and subthemes from bottom up by organising the data into increasingly more abstract units of information.

- The researcher keeps a focus on learning the meaning that the participants hold about the problem or issue, not the meaning that the researchers bring to the research or that writers express in the literature.
- The research process for qualitative researcher is emergent. This means that the initial plan for research cannot be tightly prescribed, and some or all phases of the process may change or shift after the researcher enters the field and begins to collect data.
- The inquirer reflects about how their role in the study and their personal background, culture, and experiences hold potential for shaping their interpretations, such as the themes they advance and meaning they ascribe to the data (Creswell 2014:186).

During interviewing, it is vital to make full and accurate notes of what goes on. Always sit down immediately after interview and jot down your impressions (De Vos et al 2012:359).

3.3.2.3 *Data collection process*

The researcher approached professional nurses allocated in surgical and medical wards. An information document was read to all those who were willing to participate. In the study, an appointment was made during tea time and lunch breaks. At an agreed time, the researcher physically interviewed the participant in a private room so as to maintain privacy; confidentiality was maintained by not using the participant's real names and field notes and audio tapes were kept safely. The researcher used audio tape to record the participant's responses. The participants were interviewed for 45 to 60 minutes. Field notes were used.

3.3.2.4 *Ethical considerations related to data collection*

The research was not harmful to participants. Insensitive and intrusive questions that may undermine the participant's autonomy were avoided (Botma et al 2010:56).

According to Polit and Beck (2012:127), ethics is a system of moral values that is concerned with degree to which research procedures adhere to professional, legal and social obligations to the study participants.

According to Creswell (2014:97), the following ethical issues should be adhered to when collecting data:

- Respect the site, and disrupt as little as possible. Researchers need to respect research site so that they are left undisturbed after research study. This requires that the inquirers especially in qualitative studies involving prolonged observation or interviewing at a site, be cognisant of their impact and minimise their disruption of the physical setting. In this study the researcher made an appointment with the participants and arrives on time as agreed.
- Avoid deceiving participants. Participants need to know that they are actively participating in a research study. The researcher reminded the participants about the purpose of the study.
- Respect potential power imbalances. Interviewing is increasingly being seen as a moral inquiry. The interviewers need to consider how interview will improve the human situation, how sensitive interview interaction may be stressful for the participants, whether participants have a say in how their statements are interpreted, how critically the interviewees might be questioned, and how the consequences of the interview for the interviewees and the groups to which they belong might be.
- Avoid exploitation of participants, there needs to be some reciprocity back to the participants for their involvement in your study. This might be a small reward for participating, sharing the final research report, or involving them as collaborators. In this study the researcher did not leave the participants abruptly.
- Avoid collecting harmful information. Researchers need to anticipate the possibility of harmful, intimate information being disclosed during data collection process (Creswell 2014:97).

3.3.3 Data analysis

According to Polit and Beck (2012:156), the purpose of data analysis is to organise, provide structure to, and elicit meaning from data. Data analysis and collection often occur simultaneously in qualitative studies.

The researcher scrutinised collected data by reading the data over and over in order to understand meaning of collected data. Verbatim transcription of audio taped interviews is very important. Information was categorised into themes and subthemes. Data analysis was guided by Creswell's (2014:97) six steps which are interrelated:

- Organise and prepare data for analysis which involves transcribing, interviews and scanning.
- Develop a general sense by reading through all the data.
- Code the data by organising the materials and bringing meaning to the information.
- Describe and identify themes
- Represent the findings, use narrative passage to convey the finding into analysis.
- Interpret data (Creswell 2014:97).

3.4 TRUSTWORTHINESS

Trustworthiness is a method of establishing validity and reliability of qualitative research. It was adopted from Lincoln and Guba (1985:290-294). Rigor in qualitative research is ensured by credibility, dependability, conformability and transferability (Brink et al 2012:172).

Credibility

This is a criterion for evaluating integrity and quality in qualitative studies, referring to confidence in the truth of the data (Polit & Beck 2012:124).

Credibility was ensured by the following measures:

- Prolonged engagement. The researcher was in the field for a prolonged period until data saturation has been reached. Data was collected over a period of a month; the researcher spent 45 minutes to an hour with each participant.
- Performing member check. By consulting with participants with the results for confirmation (Brink et al 2012:119). The participants were asked about their responses during the data collection and also at the end when data has been collected and analysed to confirm if their responses were interpreted correctly.

- **Dependability**

According to Brink et al (2012:119) is the provision of evidence such that if it were repeated with the same or similar participants in the same or similar context, its findings would be similar. The research process and procedures were adhered to and the researcher was guided by the University Research policy.

- **Conformability**

The data must reflect the voice of the participants and not the researcher's biases or perception (Brink et al 2012:120) in this study the researcher documented the procedure, check and recheck the data throughout the study. The findings, conclusions and recommendations are supported by data that was collected among participants.

- **Transferability**

It is the ability to apply the findings in other contexts or to other participants (Brink et al 2012:173). In this study, transferability will be ensured by thoroughly describing the research context and the assumptions that were central to research.

3.5 CONCLUSION

This chapter discussed research design, research method, and sampling including population, Ethical considerations, data collection and data analysis. The next chapter will be on presentation and description of research findings.

CHAPTER 4

PRESENTATION AND DISCUSSION OF RESEARCH FINDINGS

4.1 INTRODUCTION

In this chapter, the researcher discusses the data interpretation and the findings. The purpose of the study was to explore and describe the perceptions of professional nurses on the impact of shortage of resources for quality patient care.

In qualitative research data analysis is non- numerical, and usually in the form of written words or videotapes, audiotapes and photographs. It involves an examination of text rather than the numbers that are considered in qualitative studies. Frequently, a massive amount of data in the form of text is gathered (Brink et al 2012:193).

According to Botma et al (2010:220) the process of data analysis involves making sense of text and image data. It involves preparing data for analysis, conducting different analyses, moving deeper and deeper into understanding the data, and making an interpretation of the larger meaning of data. In qualitative research data analysis is almost always conducted concurrently with gathering data.

The purpose of data analyses is to organise, provide structure to, and elicit meaning from data (Polit & Beck 2012:556).

4.2 DATA MANAGEMENT AND ANALYSIS

Data management is reductionist in nature: it involves converting masses of data into smaller, management segments (Polit & Beck 2012:562).

Data was collected by in-depth face to face interview with 10 participants; the researcher used field notes and audio tape to record the information. To protect participant anonymity and confidentially, participants were interviewed in a private room, participant's names were not used, and the researcher used codes. The audio tape and transcribed data were kept in a safe place and were only accessible to the researcher.

Participants were asked open-ended question following the interview guide and flexibility was allowed. To obtain clarity from participants' response, probing questions were asked.

Data was analysed by open coding, based on Tesch (cited in Creswell's (2014:197) six steps which are interrelated.

Step 1: Organise and prepare data for analysis

Narrative information obtained from participants was organised, related types of information were clustered, themes and categories identified in order to build detailed description of the phenomena under study which is the perceptions of professional nurses on impact of shortage of resources for quality patient care.

Step 2: Read or look at all the data

The researcher scrutinised collected data by reading the data and listening to the audio tape over and over in order to understand meaning of collected data. Verbatim transcription of audio-taped interviews is very important. Information was categorised into segments and then coded.

Step 3: Coding of all the data

Coding is the process of organising the data by bracketing chunks (or text or image segments) and writing a word representing a category in the margin. It involves taking text data gathered during data collection (Creswell 2014:197). The researcher tried to get some sense of the whole by reading all the transcriptions carefully and developed codes.

Step 4: Describe and identify themes

Themes refer to the major findings and are used to create headings in the report of finding. They should display multiple perspectives from individual case across different cases (Botma et al 2010:225). The researcher used the coding process to generate a description of themes from the categories.

Step 5: Represent findings

The researcher looked at data that is common and developed themes and subthemes. Related themes were grouped together. To determine the final theme, the researcher compared the data collected from one participant with that of the other participant.

Step 6: Interpret data

This is a final step which involves interpretation of the findings or results. The researchers read the field notes and listen to audio tape in order to understand the participant's view point on perceptions of professional nurses on impact of shortage of resources for quality patient care. The researcher went to relevant literature to check the findings of other researchers.

4.3 RESEARCH RESULTS

Research findings will be discussed hereunder. Data was collected in Mankweng hospital from professional nurses in surgical and medical wards. Unstructured interview was conducted and information was captured by means of voice recorder and field notes. Data was collected until no new information emerged. The researcher used Tesch's method to analyse the data. Five themes and eighteen subthemes emerged from the data.

4.3.1 Sample characteristics

The researcher used purposive sampling. This type of sample is entirely on the judgment of the researcher, in that a sample is composed of elements that contain the most characteristic, representative or typical attributes of the population that serve the purpose of the study best (De Vos et al 2012:232). The purposive sample of this study consisted of the total of 10 professional nurses who met the inclusion criteria.

The study was conducted from ten professional nurses who have 5-20 years' experience, age between 34 and 60 years. The participants were allocated in medical and surgical wards. Unstructured interview was conducted for 45 to 60 minutes with each participant. The study was conducted from eight (8) females and two (2) males. It was observed that there were small numbers of males within the hospital.

4.3.2 Themes and subthemes

The following five themes and eighteen subthemes emerged from the data as indicated in table 4.1.

Table 4.1 Themes and subthemes

No	Theme	Sub-theme
1	Shortage of staff	<ul style="list-style-type: none">• High absenteeism rate• High staff turnover• Performance of non-nursing duties• Increased workload
2	Shortage of material resources, equipment and supplies	<ul style="list-style-type: none">• Delayed patient diagnosis• Delayed treatment• Extended length of stay
3	Work motivation	<ul style="list-style-type: none">• Low morale• Unfair performance rating• Extended working hours• Demotivation
4	Effects on patient care	<ul style="list-style-type: none">• Poor quality patient care• Length of stay• Nosocomial infection
5	Feelings	<ul style="list-style-type: none">• Fatigue• Burnout• Anger• Shame

4.3.2.1 Theme 1: Shortage of staff

In this study, professional nurses perceive shortage of staff as an obstacle for the provision of quality patient care. The nursing shortage is undermining the goals of health system globally and challenging nursing ability to meet the needs of our citizens. Nursing shortage is linked to increased mortality, staff violence, accidents/injuries/cross infection and adverse postoperative events (Oulton 2006:345).

Shortage of staff is aggravated by the policies in which the government is no longer hiring new personnel, posts are frozen. This is confirmed by Gross, Riley, Kiriinye, Willy, Kamenju, Oywer, Wambua and Rogers (2010:824).

It was found that shortage of health care workers in low income countries is complicated by problems with motivation and retention and by unemployment among health care providers who are professionally qualified but unable to find jobs. Many low-income countries face fiscal restraints on hiring within the public sector due to macroeconomic policies that cap salaries, freeze hiring and neglect education and training.

According to Chen, Evans, Anands and Boufford (2004:1984) nearly all countries are challenged by workers' shortage, skill imbalances maldistribution, and negative work environment. The same sentiment was shared by the participants as detailed below:

“Shortage of staff affects patient care negatively for example if there is only one professional nurse on duty she/he cannot meet the patient's needs, resulting in prolonged hospitalisation.”

“Shortage of staff affect ehh ehh the patients in general in this way patient may die or are dying due to lack of resources while waiting for operation.”

Health personnel shortage especially in public health sector is aggravated by staff competition for qualified health professionals from the private sector and more developed economies such as South Africa, Europe and United states among others. The exodus of skilled health workers from public sector is mainly attributed to lack of career progression, unsatisfactory terms and conditions of service, poor working environment and lack of incentives, including promotions. The productivity of those remaining within the public sector continues to be affected by low morale as well as the increased disease burden mainly due to HIV/AIDS (Nkomo 2013:31). He further explains that other than inadequacy of the health workforce, there is also a problem of imbalanced distribution of health personnel between the rural and urban areas. The workload is forever increasing.

The following subthemes were identified in the theme of shortage of staff:

- High absenteeism rate
- High staff turnover
- Performance of non-nursing duties
- Increased workload

Subtheme: High absenteeism rate

Most people absent themselves from work due to different reasons. According to Singh (2012:13), absenteeism can be classified in three broad categories, namely sickness absence, authorised absence, and unexcused absence. Sickness absence can be categorised as absent due to illness, authorised absence is when employees are granted permission to be absent such as study leave, and unexcused absence are absence that are not included in sickness absence or unauthorised absence usually when explanation is not given for absence or the excuse is not accepted by the employer.

It is a growing management concern. It can contribute to understaffed units, staffing instability, and other factors that could have negative impact on patient care (Unruh, Joseph & Strickland 2008:673). In this study, participants verbalised that shortage of staff leads to the remaining one being exposed to sickness as indicated below

“There are many sick leaves in this unit, if there are some problems in the unit people absent themselves from work when they come back they come with sick notes.”

According to Nyathi and Jooste (2008:30) absenteeism results in increased workload for nurses who stand for colleague who is not on duty and can lead to situations in which lack of motivation among nurses and lowering of quality of patient care may occur. The study conducted indicated that personal and managerial characteristics and organisational and working conditions may lead to absenteeism in the workplace. They further explain that nurse managers may experience difficulties in altering work schedules and reallocating the nursing tasks of those who are absent from work to the nurses who are present to ensure continuity of patient care in the unit.

Absenteeism may be directly related to work conditions, reflecting on quality and productivity and on personal life of the nursing profession. Absenteeism has become a problem for organisations and managers and worries nursing as a whole, since it reflects on care quality. The absence of nursing employees disrupts teamwork and alters the quality of patient health care. Moreover, it causes problems in the management position, because they are responsible for solving some administrative issues (Huber 2008: 67).

Subtheme: High staff turnover

The participant indicated that people are resigning based on various reasons. They leave the current workplaces and go where they are paid well, others resign because there is a confusion about the latest reforms that is taking place in the country in both public and private retirement fund contributions for employment, others, is because they are overloaded with work, posts are frozen, people who die or resign are not replaced as indicated below:

“People are resigning ehh as they are resigning we are pulling very hard to be able to render quality patient care, we don’t have ample time to care for our patients.”

“I am planning to resign as there is no satisfaction in this work environment.”

“I feel that my Organisation does not consider our workload and I do not have the choice but to join the nearby private hospital”

According to Nkomo (2013:68), high staff turnover and vacancies that remain unfilled for a long time contributes to a situation which is compromising services provision and the health of patients.

This is further supported by Mokoka et al (2010:4) when they indicated that conditions in the workplace influence professional nurses’ intentions to leave their organisations. Nursing shortages with resultant heavy workloads, excessive mandatory overtime, unsatisfactory physical state of hospitals and demands by management, authorities, patients and visitors made it almost impossible for nurses to function effectively, prompting their decisions to leave their employer.

“The conditions in this hospital really make me to think twice about my future here.”

“As much as I want to contribute positively to my organisation, poor infrastructure and workload is a major obstacle to good patient care.”

Relationships in the workplace could influence nurses' decision to stay or leave, including friendships and support between colleagues and peers. Negative relationships are characterised by verbal abuse and lack of respect from doctors, nursing colleagues and nurse managers. At times nurses are abused verbally and even physically by patients and their families. Where relationships with colleagues were happy and collegial patients receive good care while nurses who helped one another made workload more bearable, contributing to lower turnover (Mokoka et al 2010:4).

Subtheme: Performance of non-nursing duties

The study revealed that nurses are doing non-nursing duties because of sickness and absenteeism of other categories. Another participant indicated that when other personnel are sick or absent from work, nurses take over and do other personnel's work for example if the cleaner is not on duty nurses end up mopping the floors, washing dishes and neglecting their nursing duties. If the messenger is not on duty the nurses go to pharmacy to collect medications and also go to stores to collect supplies like napkins, stationaries and others. This was indicated by the participant by saying:

“If there are no cleaners we do clean we leave our jobs and do the cleaning because we cannot work in a dirty environment.”

“It's a pity that one needs to do extra work if other cadres are not available, you end up being a messenger or a porter.”

Subtheme: Increased workload

Staff absenteeism, high staff turnover and performance of non-nursing duties lead to increased workload. After a century of most spectacular health advances in human history, nurses are confronted with unprecedented and interlocking health crises, some of the world's poorest countries face rising death rates and plummeting life expectancy even global pandemics threaten all. Human survival gains are being lost because of feeble national system.

On the front line of human survival, we see overburdened and overstressed workers, too few in number, without the support they so badly needed – losing the fight, many are collapsing under strain; many are dying especially from AIDS; and many are seeking a better life and more rewarding work by departing for richer countries (Chen et al 2004:1986).

“Most professional nurses have resigned and we are pulling very hard, personnel who are remaining are exhausted as you can see we are only three in this ward with so many patients.”

“Posts are frozen and those that have resigned will not be replaced. We are suffering as the patients need to be taken care of despite shortages of health workers.”

4.3.2.2 Theme 2: Shortage of material resources, equipment and supplies

Societies are facing medical resource scarcities, inter alia due to increased life expectancy and limited health budgets and also due to temporal or continuous physical shortages of resources. This makes it challenging to meet the medical needs of all (Krutli, Rosemann, Tornblon & Smieszek 2016:8).

Most participants indicated that shortage of medication has an adverse effect on provision of quality patient care.

“Medication is a problem there are some medications that have been out of stock for a long time, patients are discharged without treatment most of them cannot afford to go to private sector for treatment.”

“I had to turn patients away as there was no treatment for patients.”

According to Lines (2014:28), in South Africa challenges such as understaffed clinics and inefficient medicines supply chains are impeding access to treatment.

South Africa boasts the largest Anti Retro Viral programme in the world but one of the biggest threats to our health system and our HIV programme in particular is the inconsistent supply of medication to patients in need. Medicine stock-out has the dire consequences for the patients:

- Continuity of care and adequate compliance is jeopardised, negatively impacting on the general health and well-being of our communities.
- Patients are forced to come to the clinic more than often than necessary for treatment.
- Not only causing them financial stress but also unnecessarily increasing patient numbers in clinics.
- Patients start to lose faith in the health care workers ability to provide health care, often resulting in reduced retention in care and poor health seeking behavior in the future (Lines 2014:28).

The following subthemes were identified from the theme shortage of material resources and equipment:

- Delayed patient diagnosis
- Delayed treatment
- Extended length of stay

Subtheme: Delayed patient diagnosis

This study revealed that there are delays in diagnosing the patient as in most instances diagnostic equipment is not available. Patient diagnosis is delayed due to broken equipment for example in medical wards there is shortage of glucometers strips, Baumanometers, and lumber puncture needles as indicated below:

“If we don’t have BP machine it is difficult to diagnose the patient resulting in the delay in patient care.”

“I would love to help my patients but if resources are not available, what can I do? Mmmmm ... this is so bad for patients.”

Subtheme: Delayed treatment

There is no doubt that patient suffers when medicines are unavailable. Treatment may be delayed or completely unavailable. Alternate medicine may be less effective than prescribed medicine, and may results in adverse patient outcome (Bateman 2013:600)

“Medical practitioners prescribe medication, but most of the time you find that there is nothing as a result the patient will wait until they find it from other hospitals or the patient will end up complicating.”

“Lack of resources affect patients badly as procedures need to be rescheduled and patients are discharged without any intervention.”

In discussing the problems affecting the public hospitals in South Africa, the area of concern raised by participants was shortage of medication. Participants emphasised that:

“In our hospital, there is shortage of medication like insulin, and patients are suffering when discharges they wait for long before they receive their treatment”.

Shortage of equipment is affecting patient care negatively. Participants explained that when the equipment is broken it takes time to repair or to order a new one, and this will delay commencement of treatment. Procurement policy is also not adhered to as the users are not consulted on the type of product that is user-friendly and also durable.

“The procurement department order advanced equipment but they don’t have personnel to service or repair them when broken.”

“They buy fong Kong equipment which are easily broken. They give wrong readings, misdiagnosis, and wrong medication.”

“Personnel in maintenance department do not know how to repair broken equipment.”

Subtheme: Extended length of stay

The findings of the study demonstrated that the patients suffer unnecessarily as they have extended length of stay which could have been avoided if the resources were available. Patients may be receiving a raw deal, especially in the so called third-world or developing countries, where nurse-to-patient ratio are so high that every little attention is given to critical and most deserving patients in the facility, where it is proven that high ratios also lead to prolonged hospitalisation of patients (Klopper 2014:12).

“Sometimes patients wait for equipment to arrive; they are kept in the ward for a long time.”

“Operations are cancelled, patients are sent home and given a date to come back, this might lead to complications.”

“Patients are sent to other hospitals for diagnostic purpose like CT scan for example in Pietersburg; patient will have to wait in the ward for the procedure resulting in delayed diagnosis and treatment”.

“If there is staff shortage, there is going to be increased patient mortality.”

4.3.2.3 Theme 3: Work motivation

Work motivation is regarded as the drive to become the best, a desire for personal growth and development is a requirement for personal fulfillment. Motivation ensures that workers thrives well where there is a challenge and involvement in problem-solving and decision-making (Maake 2015:80).

This study revealed that professional nurses are not motivated to go to work, because they are unable to give total patient care. Going to work knowing that there is no equipment is discouraging.

“Shortage of staff leads to not having courage to come to work because you don’t have a reason to come to work because you won’t be able to provide quality patient care.”

“I am definitely demotivated to work in this institution as there are no resources to assist the patients regardless of my love for patients.”

This is supported by Toode, Routasalo Helminem and Suominon (2015:248) findings who stated that developing and retaining qualified staff nurses from the prevailing global challenges of nursing management is very important. Of all the health care workers, hospital nurses form the biggest group of careers who have close daily personal contact with patients and their relatives, Hospital nurses directly influence the quality and safety of health care. However, in some doing, they become vulnerable to work stress and decreased work motivation which includes a risk of poor performance and quitting the job. This has raised the importance of nurses' work motivation and how to best retain them in their current positions in units and hospital.

A study conducted by Luhalima, Mulaudzi and Phetlhu (2014:474) revealed that despite all the challenges there are nurses who are still motivated to continue rendering quality patient care with limited resources.

The following subthemes were identified in the theme of work motivation:

- Low morale
- Unfair performance appraisal
- Extended working hours
- Demotivation

Subtheme: Low morale

Low morale in the nursing workforce can be costly for organisations and impact negatively on patient care. Workplace with low morale have a real organisational cost which impact ultimately on patient care (Wildschut & Mqolozana, 2008: 40). Low to moderate levels of morale affect productivity than increase it. Workers with low morale can respond by poor workmanship, wasting resources or even sabotage (Weakliem & Frenkel 2006:339). In this study the participants indicated that their morale is low as indicated below:

“My morale is low for not being able to nurse my patient in totality, I feel like not coming to work.”

The challenge high nurse-to-patient ratios pose to quality of service and patient safety is the low morale health workers experience. Because of the great workload, health workers increasingly feel less appreciated by communities they serve, as communities often see nurses as giving less attention to patients which compromises the safety of patients too (Klopper 2014:12). Participants revealed that their morale is low when they see the patient suffering and not being able to help as indicated below:

Not being able to provide care to the patient strain nurses, you feel as if you have contributed to poor prognosis or poor recovery.”

“Personnel too are not satisfied we are not doing as expected because of shortage of staff really is affecting us negatively.”

“Morale is affected negatively for not being able to help the patient.”

“The relationship with other health professional is strained because others think that other personnel are wasting the resources.”

Subtheme: Unfair performance appraisal

From the interviews conducted so far, health professionals seem to be demotivated; they don't have a reason to go to work because they feel as if they are failing the patients. They watch patient's condition deteriorate while waiting for the treatment or operation. Most of the time duty rooster is rescheduled to cover shortage, if the cleaner is absent they do her job but during performance appraisal they are underrated, they don't get incentives for their hard work, they became demotivated.

In this study, it was revealed that professional nurses are not happy in the way performance appraisal is done. They work very hard under pressure where there is high absenteeism but the rating is low, they don't get performance bonuses, this was indicated by one participant as indicated below:

“We work very hard but when managers do performance appraisal we are rated three (3) as a result we don't get performance bonuses.”

Subtheme: Extended working hours

The study revealed that nurses are working long hours. Where there are only two professional nurses on duty and if one is sick or absent the remaining work is extended. Instead of going at 14h00 the manager will request the remaining nurse to work until 19h00.

“If one staff member is sick one have to work overtime to cover for the other staff member resulting in fatigue and demotivation.”

Subtheme: Demotivation

Health professionals are demotivated; they don't have a reason to go to work because they feel as if they are failing the patient. They watch patient's condition deteriorate while waiting for the treatment or operation. Most of the time duty rooster is rescheduled to cover shortage, if the cleaner is absent they do her work but they are not rewarded.

You know I feel demotivated for working in the ward that is under-sourced, despite this challenges the patient expect to be nursed in totality.

Health services in rural areas are known to be under-sourced in several ways and working conditions are often described as unfavorable. Nurses working under such conditions are likely to be demotivated.

4.3.2.4 Theme 4: Effects on patient care

Shortage of health professionals reduces the number of facilities equipped to offer emergency obstetric care 24 hour a day and are significantly related to quality of care and maternal rates. Some countries are experiencing depletion of their workforce to migration and HIV/AIDS related illness (Gerein, Green & Pearson 2006:40).

According to Oulton (2006:346), shortage is hurting health care systems, patients, and staff. Misuse and maldistribution show up as reduced quality job satisfaction, high staff turnover rates and increased care cost.

There have been a number of studies in the United States and Canada showing that the risk to the patients increases when number of qualified personnel decreases: The mortality rates go up and the risk to the nurse go up as well. The participants revealed that shortage of resources affect provision of quality patient care negatively, in an emergency if the apparatus is not functioning properly the patient might die.

“The suction apparatus is not in good working condition in an emergency the personnel cannot suction properly and the patient might drown in his/her secretions.”

The following subthemes were identified from the major theme of effects on quality care:

- Poor quality patient care
- Length of stay
- Nosocomial infection

Subtheme: Poor quality patient care

South Africa faces the challenge of finding a balance between developed and lesser developed health systems to provide quality health care for all citizens. There is evidence that the practice environment and adequate patient to nurse workloads is integral to better nurse reported quality of care (Coetzee et al 2013:163). One participant said:

“We provide poor quality to our patients and this is hurting us emotionally. We just work to complete the work but quality is a problem”.

“No matter whether one wants to deliver quality patient care, if the infrastructure is inadequate, poor delivery will prevail”.

Subtheme: Length of stay

Hospital length of stay (LOS) has been an essential indicator of hospital efficiency and quality of care. Prolonged LOS in acute care wards has been associated with greater risk of adverse events in hospital morbidity and mortality and readmission after discharge as well as with a marked increase in health expenditure (Barba, Marco, Canora, Plaza, Juncos, Hinojosa, Bailon & Zapatero 2015:773). The study revealed that length of stay can have negative impact on the patient income, some patient loses their lives and financial income. One participant commented that the patients experience unnecessary length of stay due to unavailability of equipment and supplies.

“I feel sorry for patients as they have to stay in hospital for longer periods. This can be avoided by providing efficient patient care if adequate resources are available.”

Subtheme: Nosocomial infection

Hospital acquired infections are infections that are neither present no incubating when a patient enters hospital. It adds to functional disability and emotional stress of the patient and add in some cases lead to disabling conditions that reduce the quality of life. Nosocomial infection is caused by microorganisms acquired by exposure to another patient, hospital personnel, visitors, medical devices and hospital environment (Roshni, Reghu, Vijayan & Krishnan 2014:291).

Nosocomial infections (Nis) are a global problem, present in all health systems, irrespective of health services level. Nis cause a variety of medical, ethical, economic and legal consequences. These infections cause substantial morbidity and mortality, prolong hospitalisation, and increase direct patient costs and number of hospital staff (Milosevic, Korac, Stevanovic, Jevtovic, Milosevic & Jovanovic 2014:132).

The participants indicated that they don't have antiseptic solutions to wash their hands between patients. There are no paper towels to wipe their hands after washing hands.

“We don't have side wards for patients with infectious diseases; there is a possibility of spreading the infection from one patient to another.”

4.3.2.5 Theme 5: Feelings

Feelings of powerlessness have been reported to affect nurses' perceived ability to provide competent quality care and have contributed to moral dilemmas and burnout among nurses (Kornhaber & Wilson 2011:172).

The participants revealed that they feel angry and powerless when they fail to provide quality patient care.

“I feel angry for failing the patients it is as if I am contributing to the patient's prognosis.”

“Just imagine looking at the patient suffering and not being able to help her I feel powerless.”

The following subthemes were identified from theme feelings.

- Fatigue
- Burnout
- Anger
- Shame

Subtheme: Fatigue

Fatigue is a final result of a progressive and accumulative process that is caused by prolonged, continuous and intense contact with the patients, the use of self, exposure to stress. It evolves from a state of compassion discomfort, which if not effaced through adequate rest, leads to compassion stress that exceeds nurse's endurance levels and ultimately results in compassion fatigue (Coetzee & Klopper 2010:237). One participant verbalised that she is always tired due to overload as indicated below:

“With all the challenges, one is always fatigued and tired to work productively.”

Subtheme: Burnout

Burnout has been conceptualised as a syndrome of emotional exhaustion that is feeling of being emotionally overextended. It appears as a consequence of working in contact with patients and also in a very demanding environment (Ersoy-Kart 2009:166). Emotional exhaustion can lead to staff conflicts, absenteeism, lowered morale, and decreased productivity which finally ends up in the staff suffering from burnout syndrome and the result is deficit and compromising patient care. The majority of participants verbalised that they are suffering from burnout due to overload and fatigue:

“I feel that I am no longer productive since I suffer from burnout. I cannot even tell my head apart from my feet”.

The study conducted by Al-Dardas, Al-Gazai, Al-Turki, Al-Marghrabi and Al-Enizi (2010:45) indicated that burnout syndrome is quite common among doctors and nurses and differs from unit to unit of their work.

Subtheme: Anger

Anger is defined as the effect experienced by an individual when irritated or frustrated, can be associated with Psychological distress (Ersoy-Kart 2009:166). Participants indicated feelings of anger when they were unable to help the patients who really need assistance.

“Oh no I feel angry for failing to help the patient; the patient is looking at me hoping to be assisted.”

Subtheme: Shame

Shame and humiliation are professionally and personally fragmenting and disabling. They both undermines autonomy and ability to act, disrupting the individuals' sense of boundedness and thus the sense of competently occupying a coherently defined role. This directly challenge personal and professional integrity and function by disrupting necessary and clear identity-forming boundaries (Sanders, Pattison & Hurwith, 2011:84).

The study revealed that the participants felt ashamed when they fail to provide patient with quality care due to shortage of resource. One participant indicated that:

“I feel shame for not being able to help the patient I cannot her/him in the eyes when they ask for help hey.”

“It’s a shame that patients are always looking for help from us but we are unable to assist based on the shortage of resources.”

4.4 CONCLUSION

The data was collected in Mankweng hospital from ten (10) professional nurses allocated in medical and surgical wards. Data was analysed following Tesch method (Creswell 2014:97). Five themes and eighteen subthemes emerged from data collected. Participants verbalized on the subthemes that contributed to the impact on the shortage of resources which inadvertently contribute to negative quality patient care. The findings of this study were similar to the majority of other studies that were conducted in the continent and also internationally. The findings also demonstrated that the patients are affected if there is a shortage of resources, even if the health care workers are willing to render efficient patient care.

In chapter 5 conclusions, limitations and recommendations are discussed.

CHAPTER 5

CONCLUSION, LIMITATIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

The previous chapter presented interpretation and findings on the perceptions of professional nurses on impact of shortage of resources for quality patient care.

The study was guided by the following objectives:

- Describe the perceptions of the professional nurses on impact of shortage of resources on patient care.
- Describe how material and physical resources affect professional nurses' ability to provide patient care.

Themes and subthemes were identified and validated in conjunction with relevant literature.

This chapter summarises the findings, limitations, conclusion and recommendations.

5.2 RESEARCH DESIGN AND METHOD

In this study the qualitative research method was followed. According to LoBiondo- Wood and Haber (2010:101) qualitative method focuses on the whole of human experience and the meaning ascribed by individuals living the experience. Qualitative researchers study things in their natural setting, attempting to make sense of, or interpret, phenomena in terms of meanings people bring to them. Naturalistic setting is one that people live in every day (LoBiondo-Wood & Haber 2010:86). The study was conducted in a hospital where participants are working.

Exploratory-descriptive qualitative research was relevant for this study. It provides information and insight into clinical or practice problems. A well-designed exploratory-descriptive qualitative study answers the research problem (Grove, Burns & Gray 2013:76).

The structure domain of Donabedian theory confirmed that if resources are not available there will be a negative impact on the quality patient care.

Data was collected through face to face interview from 10 professional nurses in surgical and medical ward. The participants had five or more years' experience as professional nurses. Non -probability sampling was used. Participants were all exposed to one grand tour question followed by probing questions guided by participants' response. Data was captured by means of audio tape and field notes. Data was analysed guided by Creswell's Tesch method (Creswell 2014:97). Data was read and reread themes and subthemes emerged. Confidentiality was maintained by not using the participants' real names and interviews were conducted in a private room to maintain privacy.

5.3 SUMMARY OF RESEARCH FINDINGS

The study revealed that participants have the same understanding that shortage of resources has negative impact on provision of quality patient care. Five major themes and eighteen subthemes emerged:

- Shortage of staff
- Shortage of material resources, equipment and supplies
- Work motivation
- Effects on patient care
- Feelings

5.3.1 Shortage of staff

Shortage of human resources is an area of concern in Mankweng hospital, most participants revealed that they are short staffed; due to this shortage, they are not able to provide quality patient care. They revealed that there is shortage of doctors, nurses and general assistants. This is supported by Naicker, Plange-Rhule, Rodger and Eastwood (2009:60) as they indicate that the health systems of sub-Saharan Africa have been badly damaged by migration of their health professionals. The consequences for some countries of losing health workers are becoming increasingly recognised and aired widely in the public media.

According to Gerein et al (2006:44) working in an environment of under-staffing and attrition can reduce job satisfaction.

The participants indicated that health professionals are leaving their job in large numbers. Most of them are resigning because they need money for their children's education. According to Gerein et al (2006:44) a continued inability to provide quality patient care can contribute to job dissatisfaction, stress, demotivation and intentions to seek other employment, creating a vicious cycle of staff attrition.

Mokoka et al (2010:9) support the findings, work schedules, inflexible hours, long shifts and mandatory overtime causes disillusionment, influencing nurses to look for other jobs. Older nurses were reportedly feeling the strain of long hours, forcing them to retire earlier than they had intended to. Younger nurses were reportedly unhappy with shifts as these impacted negatively on their family and social lives.

Findings indicated that most of the time only two professional nurses are allocated per shift, if one is sick or absent from work the remaining will perform the duty that was supposed to be done by the other professional nurse. The workload is increased. According to Gerein et al (2006:44), when the health professional is absent from work the existing staff may have to take on new roles, whether outside their usual scope of practice, or inappropriate to their level of experience.

The study revealed that nurses are performing non-nursing duties like cleaning the ward, taking specimen to laboratory, going to stores to fetch napkins and going to pharmacy to take medication for the patient.

The participants indicated that when the cleaner is absent from work, nurses clean the ward and perform other non- nursing duties which further increases workload.

5.3.2 Shortage of material resources, equipment and supplies

The study revealed that shortage of material resources, equipment and supplies like glucometer for monitoring blood glucose, lumbar puncture needles for investigating or diagnosing meningitis resulting in prolonged stay in the hospital.

Most of the time scan machine is not in good working condition, patients are sent to the other hospital for the investigations or have to wait for some days or weeks before the machine is fixed resulting in delayed diagnosis and treatment. The researcher observes that there were no supplies like napkins for patients who are confused and cannot go to the toilet on their own. The shortage of material resources, equipment and supplies compromise quality patient care.

The WHO considered drug shortage to be a complex global challenge. Both developing and developed countries were affected by drug shortage problems, which seemed to be worse in the recent years. In November 2014, the European Association Hospital Pharmacists reported that 80% of 607 practitioners in 36 European countries had sourcing problems and that 66% said these problems arose on a daily or weekly basis (Yang et al 2016:2).

5.3.3 Work motivation

The researcher's observation was that the staff in the unit was not happy they looked sad and not motivated to perform their duty, one nursing axillary was not happy to go to fetch some napkins because the messenger was not on duty.

In this study, it was discovered that where there is shortage of resources, the nurses don't have courage to go to work. One participant indicated that he does not have courage to go to work.

The participants appeared to be demoralised; the morale was low because they are not able to provide care to the patients. One participate revealed that they are overloaded with work but not remunerated adequately. When the managers implement performance appraisal they are underrated. Human resource is vital component for health Organisation in delivering health services. There are many factors that affect employee performance like: working conditions, employee and employer relationship, training opportunity, job security and institutions overall policies and procedures for rewarding employees. Among those factors which affect employee's performance motivation that comes with reward is of the utmost importance. Motivation is an accumulation of different process that influence and direct our behavior to achieve some specific goals (Negussie 2013:107).

5.3.4 Effect on patient care

The study revealed that, in most cases nurses of sub-category perform duties that are supposed to be done by professional nurses. According to Lubbe and Roets (2014:59), the dire shortage may contribute to nurses performing tasks that they are not competent and licensed or registered to perform. The health and safety of patient can be threatened.

Most of the time intervention is delayed due to shortage of equipment for example if lumbur puncture needles are not available, diagnostic procedures are delayed, resulting in delayed initiation of treatment. The study that was conducted by Kenyon and Sen (2014:18) revealed that longer admissions can lead to more difficult discharge plan as usually patients do not maintain mobility while in hospital, this prolonged immobility can lead to deconditioning of the body.

Participants revealed that they don't have antiseptic solutions to wash their hands and no paper towel to dry their hands as such, infection is spread from one patient to another. Prolonged hospitalisation expose the patient to different kinds of infections because most of the time the immune system of the patient is lowered. This is supported by Nguyen, Nguyen and Jones (2008:1297) when they indicate that in the developing countries the problem of infection control is compounded by lack of resources, high rate of multi resistant bacteria and lower perceived priority of infection control in an environment where medical services are already under pressure.

5.3.5 Feelings

Feelings of powerlessness have been reported to affect nurses' perceived ability to provide competent quality care and have contributed to moral dilemmas and burnout among nurses (Kornhaber & Wilson 2011:1). The participants revealed that they feel angry and powerless when they fail to provide quality patient care. They verbalized that they were angry and ashamed of not providing good quality patient care and that also led to fatigue and burnout.

5.4 CONCLUSION

Shortage of human resources affects provision of quality patient care negatively. The participants explained that there is shortage of professional nurses. Most of the time there are only two professional nurses allocated per shift, if one is not on duty due to some reasons the remaining one will do the work that was supposed to be done by the colleagues, instead of going off at 14h00 they go off at 19h00, this put strain on the remaining nurse' health.

The participants pointed out that there is shortage of medications, patient is given alternate medication while waiting for their prescriptions. Sometimes it takes time for the medication to be in-stock; this might delay healing or prolong length of stay in the hospital.

There is no doubt that the patient suffers when medicines are unavailable. Treatment may be delayed or completely unavailable. Alternate medicine may be less effective than the prescribed medicine and may results in adverse outcome. Health care professionals are also affected because their time and attention is directed towards problems caused by medicine shortages (Iyengar,Hedman, Forte & Hill 2016:124).

Patients 'operations are postponed or cancelled due to shortage of equipment, resulting in delayed treatment. Patients are transferred to other hospitals like Pietersburg for scan or they stay in the ward for a long time waiting for the machine to be fixed. This may have negative impact on patient's employment. In South Africa, the unintended consequences are also devastating patients have lost employment because they have taken a day off every week to return in vain to clinics hoping that they will receive out of stock ARVs (Patel 2013:46).

Professional nurse's morale is low because of failing to provide quality patient care due to shortage of resources.

5.5 RECOMMENDATIONS

The researcher makes the following recommendations based on the research findings:

5.5.1 Shortage of human resource

- The department should develop recruitment and retaining strategies in order to avoid high turnover.
- Exit interview should be conducted to establish the reason for resigning.
- Staff should be promoted to higher grades when due.
- Personnel who work hard should be acknowledged e.g. having employee of the month, his/her photo pasted on the entrance of the unit or institution.
- The support staff should be hired so that nurses do not do non-nursing duties.

5.5.2 Shortage of medical supplies

- Broken equipment should be fixed immediately.
- In-service training should be conducted for the new equipment.
- The procurement should purchase the equipment of high quality.
- Equipment should be serviced on regular basis.

5.5.3 Recommendation for further study.

Further studies need to be conducted on a larger scale which will include other health care workers like:

- Professional nurses who have less than five years' experience.
- Hospitals in the rural areas.
- Different methodologies should be employed.

5.6 CONTRIBUTION OF THE STUDY.

The study revealed that there is shortage of human resource due to staff turnover which affect provision of quality patient care. The health workers were willing to provide quality patient care but the lack of resources hindered their willingness. The findings present an opportunity for policy makers to realign or review some policies such as the procurement policy. Procurement policy should be reviewed to help in ordering equipment of good quality.

5.7 LIMITATIONS OF THE STUDY

- The study was conducted in one tertiary hospital in Capricorn District; as such the results, cannot be generalised to other hospitals in Limpopo Province.
- The participants were professional nurses who have five or more years' experience. Professional nurses with less than five years' experience were not interviewed.
- Study was conducted in surgical and medical wards only. The results cannot be generalised to other units like intensive care, operating theatre, labour and others.
- Nurse Managers were not interviewed.
- Shortage of professional nurses with five or more years' experience.
- Other professional nurse refuse to be interviewed indicating that she does not want to be recorded even though the researcher explained that confidentiality will be maintained.
- Professional nurses who were on night duty and those who were on leave were not interviewed.

5.8 CONCLUDING REMARKS

The findings alluded that shortage of resources has negative impact on provision of quality patient care. Patients stay for a long time in the hospital waiting for treatment which is not available, most of the time they develop some complications like static pneumonia due to prolonged immobility. Patients are sent to other hospitals for diagnostic procedures.

Mankweng hospital is a tertiary hospital; the study revealed that there is shortage of resources both human and material which is affecting provision of quality patient care and the Department of Health negatively.

Nurses are the back bone of the health system, shortage of resources affect provision of quality patient care. Nurses are resigning in larger numbers resulting in poor patient care. Shortage of nurses leads to increased workload for the nurses who are remaining when others are absent, they work under pressure and patient care is compromised.

The reason for resigning is that they need money for their children's education, working conditions are poor, and the government is not hiring new employees when one resigns or dies. Posts are frozen. Absenteeism is another contributory factor for shortage of human resources. Most of the time there are only two professional nurses per shift, if one is sick the other one must cover for the one who is absent which predispose her/him to exhaustion and sickness.

Health professionals are demotivated; they don't have a reason to go to work because they feel as if they are contributing to patient's poor prognosis. They watch patient's condition deteriorate while waiting for the treatment of operation. Most of the time duty rooster is rescheduled to cover for the shortage, if the cleaner is absent they do her job, but during performance appraisal they are under rated, they don't get incentives for their hard work and they become demotivated.

Hospitalisation is prolonged unnecessarily; operations are cancelled because of broken equipment. Sometimes they are discharged and given an appointment to come back later, or they wait in the ward for a long time in the ward waiting for the procedure. There is a possibility of developing nosocomial infections resulting in prolonged hospitalisation.

The findings present managers with opportunities to create environment which is conducive to provision of quality patient care. Positive environment where there is good interpersonal, staff turnover is reduced.

In this chapter the summary of the findings, limitations, conclusion and recommendations were made.

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INTERNET SOURCE

www.qualitydigest.com (accessed 2 February 2016).

ANNEXURES

ANNEXURE A

Ethical clearance certificate from Department of Health Studies, 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/474/2015

Date: 25 November 2015

Student No: 3062-535-1

Project Title: Perceptions of professional nurses on impact of shortage of resources for quality patient care in a public hospital: Limpopo Province.

Researcher: Mokoena Machidi Julia

Degree: MA in Nursing Science

Code: MPCHS94

Supervisor: Prof ZZ Nkosi

Qualification: PhD

Joint Supervisor: Prof JH Roos

DECISION OF COMMITTEE

Approved

Conditionally Approved

Prof L Roets

CHAIRPERSON: HEALTH STUDIES HIGHER DEGREES COMMITTEE

Prof MM Moleki

ACADEMIC CHAIRPERSON: DEPARTMENT OF HEALTH STUDIES

PLEASE QUOTE THE PROJECT NUMBER IN ALL ENQUIRES

ANNEXURE B

Letter of request to Department of Health in Limpopo

PO Box 55140

Polokwane

0700

05 January 2016

The Secretary
Limpopo provincial Department of Health
18 College Street
Polokwane
0700

REQUEST FOR PERMISSION TO CONDUCT RESEARCH STUDY

I, Mokoena Machidi Julia hereby request permission to conduct research study entitled **PERCEPTIONS OF PROFESSIONAL NURSES ON THE IMPACT OF SHORTAGE OF RESOURCES FOR QUALITY PATIENT CARE IN A PUBLIC HOSPITAL: LIMPOPO PROVINCE.**

I am currently an MA Cur student doing research study at University of South Africa. My supervisor is Professor ZZ Nkosi from the Department of Health Studies, Telephone number 012 429 6758.

The purpose of the study is to explore and describe the perceptions of professional nurses on the impact of shortage of resources for quality patient care and identify strategies to provide quality patient care. Ethical considerations will be adhered to.

The sample will be the selected professional nurses in surgical and medical wards who have five or more years' experience providing care to patients, who are working on the day of data collection and willing to participate in the study.

Yours faithfully

Ms Mokoena MJ (0825329123)

ANNEXURE C

Permission letter from Department of Health



LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HEALTH

Enquiries: Latif Shamila

Ref:4/2/2

Mokoena MJ
University of South Africa

Greetings,

RE: Perceptions of professional nurses on impact of shortage of resources for quality patient care in a public hospital: Limpopo Province

The above matter refers.

1. Permission to conduct the above mentioned study is hereby granted.
2. Kindly be informed that:-
 - Research must be loaded on the NHRD site (<http://nhrd.hst.org.za>) by the researcher.
 - Further arrangement should be made with the targeted institutions, after consultation with the District Executive Manager.
 - In the course of your study there should be no action that disrupts the services.
 - After completion of the study, it is mandatory that the findings should be submitted to the Department to serve as a resource.
 - The researcher should be prepared to assist in the interpretation and implementation of the study recommendation where possible.
 - The above approval is valid for a 3 year period.
 - If the proposal has been amended, a new approval should be sought from the Department of Health.
 - Kindly note, that the Department can withdraw the approval at any time.

Your cooperation will be highly appreciated.


Head of Department

Date

18/02/2016

ANNEXURE D

Letter of request to Mankweng Hospital CEO

P.O Box 55140

Polokwane

0700

10 April 2016

The Chief Executive Officer and Nurse Manager

Mankweng Hospital

Private bag x 1117

Sovenga

0727

Request for permission to conduct research study

I, Mokoena Machidi Julia hereby request permission to conduct research study entitled **THE PERCEPTIONS OF PROFESSIONAL NURSES ON THE IMPACT OF SHORTAGE OF RESOURCES FOR QUALITY PATIENT CARE IN A PUBLIC HOSPITAL: LIMPOPO PROVINCE.**

I am currently an MA Cur student doing research study at University of South Africa. My supervisor is Professor ZZ Nkosi of the Department of Health Studies, Telephone number 012 429 6758.

The purpose of the study is to explore and describe the perceptions of professional nurses on the impact of shortage of resources for quality patient care and identify strategies to provide quality patient care. Ethical considerations will be adhered to.

The sample will be the selected professional nurses in surgical and medical wards who have five or more years' experience providing care to patients, who are working on the day of data collection and willing to participate in the study.

Yours faithfully

Ms Mokoena MJ (0825329123)

ANNEXURE E

Permission letter from Mankweng CEO



LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HEALTH

MANKWENG HOSPITAL

Ref: S5/3/1/2

Enq: Makola M.M

From: HR Utilization and Capacity Development

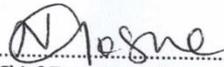
Date: 01 June 2016

Mokoena M.J
University of South Africa

REQUEST OF PERMISSION TO CONDUCT RESEARCH AT MANAKWENG : MOKOENA M.J

1. The above matter has reference.
2. This is to confirm that Mokoena M.J has been granted permission to conduct research on "Perceptions of professional nurses on impact of shortage of resources for quality patient care in a public hospital: Limpopo Province".
3. She will be conducting research as from 01 July 2016 to 31 May 2017.
4. Attached please find their application letter and approval from Provincial Office, University of South Africa Health Studies Higher Degree Committee College of Human Sciences Ethical Clearance Certificate and Research proposal.

Thanking you in advance


.....
Chief Executive Officer

02/06/2016
.....
Date

Department Of Health
Mankweng Hospital
Receiver: <i>Nikiwe</i>
2016 -06- 01
Office No. 106
Tel: 015 238 4000

ANNEXURE F

Information letter to participants

Title of the Study: THE PERCEPTIONS OF PROFESSIONAL NURSES ON THE IMPACT OF SHORTAGE OF RESOURCES FOR QUALITY PATIENT CARE IN A PUBLIC HOSPITAL: LIMPOPO PROVINCE

Researcher:

Name: Ms Julia Mokoena

Department: Health Studies University of South Africa

Phone: 082 532 9123

Email: 30625351@mylife.unisa.ac.za

Supervisor: Prof ZZ Nkosi, 0124296758, nkosizz@unisa.ac.za

You are cordially invited to participate in a research study as entitled above. The aim of the study is to explore professional nurses' perceptions on the impact of shortage of resources for quality patient care in a public hospital in the Capricorn District in Limpopo province as you form part of the rich source of information required to complete this study.

Should you agree to participate in this study, please note that such undertaking is on a voluntary basis and thus you will not receive any payment or gifts for your participation. Information collected from you will be handled so as to protect your confidentiality and your identity kept anonymous. There is however no risk envisaged in this study. The interview will last for about 45 to 60 minutes.

Your participation in this study will help the researcher to draw conclusions which may help policy makers to make informed decisions and develop skills and strategies for quality patient care.

Your participation will be greatly appreciated.

APPENDIX G

Informed consent

I.....consent to participate in the research project on **PERCEPTIONS OF PROFESSIONAL NURSES ON THE IMPACT OF SHORTAGE OF RESOURCES FOR QUALITY PATIENT CARE IN A PUBLIC HOSPITAL: LIMPOPO PROVINCE**". Information regarding the study was explained to me. I understand that anonymity and confidentiality will be ensured. Information collected from me will be shared with independent expert on qualitative research. I understand that my participation is voluntary and there will be no payment or gifts from the researcher. I may terminate my participation in the study at any time without any intimidation. I confirm that I was not forced or coerced into participating in the study, but doing it on my own free will.

My contact details are: Ms Julia Mokoena (Researcher): 082 532 9123

Prof ZZ Nkosi's details are: 012-429 6758

Participant's signature.....Date.....

ANNEXURE H

Interview guide

Biographic data

1. Age.
2. Gender.
3. Years of service as a professional nurse.
4. Unit where allocated:

Interview questions:

1. In your own words explain how do you perceive effects of resources on provision of quality patient care?
2. How do resources affect provision of quality patient care?
3. How do resources affect the morale of health professionals?
4. How do resources affect patient stay in the hospital?
5. Is there anything you want to share with me?

ANNEXURE I

Interview transcript

Interviewer

Good afternoon, thank you for agreeing to participate in the study, as I have already indicated in the information leaflet, my intention is to explore perceptions of professional nurses on impact of shortage of resources for quality patient care.

Participant

Good afternoon.

Interviewer

In your own please explain what shortage of resources mean to you as a professional nurse.

Participant

To me, shortage of resource means not having enough things that enable us to execute delegated duties.

Interviewer

Which things are you referring to?

Participants

In our unit we don't have manpower; we are experiencing shortage of doctors, nurses, other health workers and materials to enable us to provide patient care.

Interviewer

How do shortage of resources affect you as a professional nurse?

Participants

First of all I will start with shortage of human resource; we don't have enough professional nurses, we are short staffed, like now we have two professional nurses per shift, if one is sick or absent the one who is remaining will have to work hard.

Yesterday I was supposed to go off at 14H00, unfortunately the other professional nurse who was supposed to work until 19H00 was sick, I had to work until 19H00 and it is strenuous. Sometime when you are on day duty, during the middle of day the one who is supposed to be on night duty call to report that she is off sick, the one who is on duty has to go home and come back during the night, really it is inconveniencing.

Interviewer

Why are you having only two professional nurses per shift?

Participant

Eish, people are resigning, since the beginning of this year, two professional nurses has resigned.

Interviewer

What is the reason for resigning?

Participant

Mmmm, there is lot of reasons for resigning, absenteeism rate is high, resulting in increased workload, there is shortage of resources, patients and relatives are complaining about patient care, the relationship among health workers is strained, performing of non- nursing duties, eish I don't know what to say, the list is endless.

Interviewer.

I heard you saying that the relationship among health workers is strained, what is the reason for that?

Participant

When you come back from sick leave, people think that you were not sick, they believe that you absented yourself from duty deliberately. Other staff members think that others are wasting the resources.

Interviewer.

Previously I heard you saying you are performing non-nursing duties, why?

Participant

As I have already mentioned previously that absenteeism rate is high in this unit, when the cleaner is not on duty, who is going to clean the ward? It is us nurses who must clean, when the messenger is not on duty it is us nurses who are supposed to take blood to laboratory, fetch medications from pharmacy, fetch medical supplies from stores, really a nurse is jack of all trades master of none.

Interviewer.

What do you think can be done to solve the problem of shortage of human resources?

Participant.

I think the managers should develop strategies to retain the remaining staff, because at the moment the posts are frozen, the government is not hiring new staff, when the staff member resigns or dies she is not replaced, reason being that there is no money to pay new personnel. Working conditions should be improved; working being short staffed is stressful. When doing performance appraisal personnel should not be under-rated, because at the moment we are under-rated and this is demoralizing, you work hard during the year under severe shortage of staff and resources, but when it is time for payment of performance bonuses we are not recognised.

Interviewer.

Please tell me about other resources you are running short of?

Participant

We are experiencing shortage of medication, medical supplies, and diagnostic equipment. Doctors prescribe medications, only to find out that they are out of stock, we have to wait for medications from other hospitals or use alternative medication. It is frustrating; it delays commencement of treatment, and prolongs patient's length of stay in the hospital.

Interviewer

Please tell me about shortage of equipment.

Participant.

We experience problems with glucometer, CT Scan machine Blood pressure machine and others. If we admit a patient with diabetic mellitus it is difficult to monitor blood glucose resulting in patient complicating, the patient can end up admitted in intensive care unit with diabetic keto acidosis. We had shortage of lumbar puncture needles; it was difficult to diagnose meningitis.

Interviewer

How do you feel about the above shortage of resources?

Participant

I feel angry, frustrated, shame and powerlessness.

Interviewer

Why do you feel angry?

Participant

Ehh I feel angry for failing to help the patient in need, the patient is looking at me expecting to be helped, how do I help the patient if there are no resources. I also feel shame and powerless, when the relative come to visit the patient and find her in dirty clothes, and environment, I cannot look them in the eyes it is shameful. I feel powerless because there is nothing that I can do.

Interviewer

How does shortage of resources affect patient care?

Participant

Patients are affected negatively by shortage of resources for example the length of stay (LOS) in the hospital is prolonged, this may result in development of nosocomial infections, because when the patient is in the hospital she is exposed to different kinds of infections and most of them have suppressed immune system, in this ward we don't have antiseptic solutions to clean our hands, then the infection is spread from one patient to another. Prolonged hospitalization can lead to unemployment or financial loss, if the patient is not working, he is not earning money to support the family, and can be affected psychologically.

Interviewer

How do shortage of resources affect staff morale.

Participant

Staff morale is low, we don't have courage to come to work, and this is demotivating.

Interviewer.

Why do you say it is demotivating?

Participant.

It is demotivating coming to work knowing that there are no resources to care for the patient. Some equipment is broken you cannot monitor blood pressure or other vital data, the patient complicates in the hospital.

Interviewer.

I heard you saying that the equipment is broken, why don't you sent for maintenance?

Participant

Hahaha It doesn't help, they fix them today after two weeks it is broken again, and people working there don't know how to fix them.

Interviewer

What do you think can be the solution?

Participant

I think the procurement should buy quality equipment and staff should be in-service on how to use the equipment, this will help the government and safe money.

Interviewer

Thank you for your participation. If there is a need for clarification I will come back.

Participant

Thank you.