

**Experiences of final year student nurses regarding
patient safety training during clinical practice in
Lesotho**

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degree *Masters in Nursing Science* at the North-West
University

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DECLARATION

I, N.V. Sesinyi-Ngwane, declare that the dissertation entitled *Experiences of final year student nurses regarding patient safety training during clinical practice in Lesotho*, is my work and that the information obtained from other sources has been duly referenced in the text and in the reference list. I declare that it is the first time I am submitting this work for a Master of Nursing Science or any other degree at any university.

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DATE: October, 2019

ABBREVIATIONS

CHAL	Christian Health Association of Lesotho
LNC	Lesotho Nursing Council
MoHL	Ministry of Health Lesotho
NCBI	National Centre for Biotechnology Information
NCSBN	National Council State Board of Nursing
NHTC	National Health Training College
NTI	Nurses training institutions
NPSF	National Patient Safety Foundation
NRF	National Research Foundation
NUL	National University of Lesotho
SANC	South African Nursing Council
WHA	World Health Assembly
WHO	World Health Organization
USA	United States of America
WIL	Work integrated learning
HREC	Health Science Research and Ethics Committee
INSINQ	Scientific Research Committee of the School of Nursing Science
NWU	North-West University
CPD	Continuing professional development

NOTES

The Letterheads used during the request for permission to conduct this research were in use at the university.

INSINQ was the scientific research committee of the School of Nursing Science during the scientific review of the proposal.

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Nkaiseng Vivid Ngwane

October, 2019

ABSTRACT

Background

Patient safety is a fundamental principle of health care. Unsafe services have become a global concern because they diminish health outcomes, harm patients, and damage the trust, reputation, and credibility of health care services.

During student supervision in the clinical practice environment, the researcher observed incidences of negligence resulting from the incorrect processes of care from both student nurses and registered nurses. Regardless of the risk posed by these incidences, professional accountability was not demonstrated as documentation or reporting of such incidences was not completed by either registered nurses or student nurses.

Aim

This research aims to explore the experiences of final year student nurses studying at the four Christian Health Association of Lesotho Nurses Training Institutions, with regards to patient safety training in clinical practice so that recommendations to clinical practice environments, Nurses Training Institutions and the Lesotho Nursing Council could be made in order to enhance patient safety during clinical practice of student nurses in Lesotho.

Methods

Qualitative, phenomenological, exploratory and descriptive design was used. Final year student nurses from the Christian health Association of Lesotho Nurses Training Institutions were recruited following the purposive sampling methods. Permission was obtained from the Ministry of Health Lesotho Research and Ethics Committee, and North-West University Health Sciences Research and Ethics Committee. Participants gave informed, written consent and data was collected using reflective writing.

Findings

The findings showed that student nurses agree that patient safety was touched during their training and acknowledged that the topic was regarded as an important outcome of nurses' training. The research shows also that not all registered nurses, nurse educators, and clinical supervisors provided adequate supervision of student nurses to ensure safe practice during clinical practice. The reasons highlighted for lack of supervision included inadequate numbers of, registered nurses and nurse educators and lack of competency in patient safety practice that student nurses were supposed to observe.

Finally, senior student nurses assumed roles as supervisors of junior student nurses to try and bridge a gap caused by lack of supervision unfortunately, supervision occurred without proper monitoring by registered nurses or nurse educators.

Additionally, participants experience a theory-practice gap because what is taught in classroom is not practiced the same way by registered nurses in practice. Nurses seem to always want to find a shorter, and easier way of providing care resulting in substandard patient care practices. Registered nurses do not comply with policies and procedures, and it creates confusion among student nurses who are unable to distinguish between what is right and what is wrong due to the gap between their learnt knowledge and the poor role modelling of registered nurses.

Inadequate supplies and resources reinforced the habit to improvise when rendering care to patients in ways that risked patient safety. An example is using one sterile pack for dressing more than one patients. Poor infrastructure of the clinical practice environment also increased the risk to patient safety.

Conclusion

The above experiences cause student nurses to complete three years of training and yet feel that they are still not ready to provide safe patient care

This research formulates recommendations to patient safety stakeholders to enhance training that is compliant with standards and policies so that student nurses exit the programme fully prepared for practice.

Key Concepts: Patient safety, clinical practice, clinical practice environment, nursing education institution, student nurses, clinical supervision, registered nurses, clinical supervisors, and nurse educators

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CHAPTER 1: OVERVIEW OF THE STUDY

Chapter 1 provides an overview of the research. It begins with an introduction and background, which serves to show the motivating factor for this study. Paradigmatic perspectives, choice of research design, methods, and measures to ensure trustworthiness as well as ethical consideration are also discussed. Finally, an outline of the research report and a brief summary concludes this chapter.

1.1 INTRODUCTION

The World Health Organization (WHO, 2017:1) has stated that patient safety is a fundamental principle of health. Unsafe services have become a global concern because they lead to diminished health outcomes and harm to patients, as well as loss of trust, reputation, and credibility in health care services (WHO, 2017:3). As such, patient safety improvement demands a multifaceted, system-wide approach, resulting in an extensive range of actions in performance improvement and safe clinical practice. The improvement of patient safety is an essential element of quality management, thus making it a component of quality nursing education and practice. The National Patient Safety Foundation (NPSF, 2015:xii) of the United States of America (USA) as well as the Canadian Patient Safety Dictionary (Davies *et al.*, 2003:12) define patient safety as the avoidance, minimising or mitigating the risk of harm emanating from the processes of health care, bringing it to an acceptable minimum. The effectiveness of the health care system and the influence of individual performance, as well as optimal patient outcomes, are essential to patient safety.

The researcher, therefore, chose to explore the experiences of final year student nurses regarding patient safety training in clinical practice in Lesotho.

1.2 BACKGROUND

In many countries, provision of safe patient care in the clinical practice environment has been a cause for concern, regardless of whether those facilities are public or private (WHO, 2009:15; WHO, 2017:1). Evidence suggested that harm caused by patient care processes posed a significant burden in terms of morbidity and mortality of patients around the world (DeBourgh & Prion, 2012:110; WHO, 2015:1). Although the magnitude of this problem could not be exact, it was estimated that, in 2013, an incident of patient harm was reported in the USA every 35 seconds (WHO, 2015:1). Similarly, in low- and middle-income countries, a weak safety culture, flawed processes of care, and disinterested leadership worsen the situation making provision of safe care almost impossible (WHO, 2015:1). DeBourgh and Prion

(2012:111) and Billings and Halstead (2012:336) affirmed that patient safety is a result of interaction between a number of elements in the health care system. The paragraphs that follow discuss each of the elements in the clinical practice environment that impact its safety.

- **Safe patient environment:**

The environment in the health care system must be safe for patients at all times and in all of its processes to prevent harm when treating and caring for patients (Wakefield, 2008:45; WHO, 2017:1). While delivering safer care has become more challenging because of the complexity and high pressure on the environment due to factors such as inadequate structures, lack of health care commodities, overcrowding, understaffing, shortage of basic equipment, poor hygiene, and sanitation; each and every patient deserves to be given the highest priority of safe patient care (WHO, 2017:1).

The clinical practice environment, as a place where student nurses are placed for work integrated learning (WIL), has a role in orienting student nurses to their professional practice role (Clare *et al.*, 2003:14). This involves mentoring student nurses to acquire the clinical skills and shape acceptable behaviours that would be expected from them during the student phase as well as throughout their professional career (Naidoo, 2018:6). It is, therefore, a necessity to have an environment that upholds a culture of correct patient safety.

- **Patient safety policies and protocols:**

Compliance to patient safety policies by student nurses is seen by Montgomery *et al.* (2013:2) as the primary responsibility of educational institutions, but Vaismoradi *et al.* (2014:1) and Killam *et al.* (2012:2) argue that it is an equally shared obligation among individuals, clinical practice environments, and educational facilities, such as the Christian Health Association of Lesotho (CHAL) Nurses Training Institutions (NTI). According to both views, these institutions must ensure that student nurses are prepared to embrace the culture of safety by complying to patient safety policies and remaining accountable for their actions by reporting safety errors without fear of punishment in order to learn and prevent the same mistakes in future (Neudorf, *et al.*, 2008:35-39; WHO, 2017:2).

Killam *et al.* (2012:476) suggested that patient safety does not depend only on the nursing knowledge needed for daily practice, but also on knowing what nursing care is needed and how to deliver that care. In other words, student nurses are shaped by knowledge, skills, and behaviours. Whereas knowledge is gained by being in a classroom, practical skills,

behaviours, and decision making based on policies and protocols governing patient care, are acquired through experience gained in clinical practice (DeBourgh & Prion, 2012:116).

- **Nursing care and patient safety:**

In theory, clinical practice environments should uphold the highest standards of safety at any given point of care (Wakefield, 2008:45). However, the WHO (2017:2) reported that, in reality, unsafe patient care in the clinical practice environments continues to be a major source of morbidity and mortality globally. This unsafe care is classified as either potential or actual harm or error.

Actual harm or adverse events suffered by patients are usually a result of poor patient care processes and systems or medical mismanagement such as during diagnosis, treatment and or malfunctioning equipment (WHO, 2015:9). On the other hand, a near miss or risk is equally a serious threat to patient safety despite the fact that actual damage or injury may not have occurred (WHO, 2017:2). Cooper (2012:143) and WHO (2017:10) defined a near miss as an unplanned event that did not result in an injury, illness, or damage but had serious error that could have had a negative impact on the patient or had the potential to cause an adverse event but failed to do so because of chance or because it was intercepted.

Safety of care is one of the inherited universal values that form the foundation of health care delivery (Sherwood, 2011:227). Most health professions, including nursing, uphold a long-standing ethical principle that says, "First do no harm". The primary concern for the nursing profession has always been the ability to be safe and produce proficient providers of nursing care (Lubbe & Roets, 2014:59). In other words, protecting patients from harm by nursing care providers has always been a standard to be adhered to. It is from this concern that the mandate of nursing regulatory bodies to assure patient safety originated (NCSBN, 2005:1).

The Lesotho Nursing Council (LNC) is a professional regulating body whose role includes setting standards of nursing education and practice, monitoring and evaluating compliance to the set standards, and certifying that the set standards of education and practice are met (LNC, 2013:1). According to the Lesotho diploma in nursing curriculum (LNC, 2009:4), student nurses are ready to graduate from a nursing programme after successfully completing three years of training and may then be employed to practice as registered nurses. The LNC, however, has no specific regulations to measure the ability of these registered nurses to provide safe care in clinical practice. The broad tool used to guide nursing practice and education is an Act of the Lesotho government (Act 12 of 1998) and standards of education and practice (Nursing and midwifery practice standards & Nurses and Midwives Act no 12 of

2008). The researcher is of the opinion that these documents are not enough to guide effective implementation of patient safety, more so because it has been more than 20 years since the concerned Act has been reviewed. The lack of review makes this act obsolete in regulating patient safety because the field of patient safety is relatively new while the Act's last review was done before the emergence of this field (Mbuthia & Moleki, 2018:10).

- **Patient safety education for nurses:**

The Nursing Council of State Boards of Nursing USA (NCSBN, 2005:2) affirms that the nursing profession, by nature, is a practice discipline; therefore, student nurses should be placed in the clinical practice environment to learn how to provide nursing care to patients. Clinical practice is a requirement of nursing education as prescribed by regulatory bodies globally as well as in Lesotho (LNC, 2013:4; NCSBN, 2005:2). The nurses training institutions (NTI) and their affiliated clinical practice environments, should comply with this requirement of experiential learning. It is therefore evident that health care provision is conducted by a nursing workforce that represents varying levels of professional expertise including registered nurses and nurse educators as clinical nursing experts to mention but a few (WHO, 2011:29). Therefore, tools are necessary to build leadership capacity in patient care at the level of a health care facility (WHO, 2017:10).

Quality nursing education is regarded as a gateway to quality and safe patient care, and should produce positive and necessary changes in the health care system (Sherwood, 2011:277). Educational programmes should, therefore, provide appropriate learning opportunities for student nurses to be able to demonstrate progressive growth in order to meet the expectations of the profession (Durham & Alden, 2008:221). Student nurses should not only be trained on psychomotor skills but also to be critical thinkers and clinical decision makers (Tella *et al.*, 2014:1). This effort would result in registered nurses who become role models by showing moral obligation in identifying current and potential problems as well as risks that may have a negative impact on patient safety (Neurdorf *et al.*, 2008:221). Durham and Alden (2008:221) stated that provision of positive experiences of patient safety early in the nursing curricula, stimulated a patient-safety conscience, which safeguarded both student nurses and patients. Student nurses' emerging understanding of patient safety is shaped by their initial classroom experiences. As a result, a student's entry into the real clinical practice environment is influenced by how they are able to integrate learning experiences in classroom and skills laboratory with real-life experiences encountered in clinical practice (DeBourgh & Prion, 2012:117; Killam *et al.*, 2012:476).

The above discussion shows that an NTI has an obligation to develop nursing education curricula, employ adequate and qualified educators, and identify clinical practice environments that would give student nurses the required clinical learning experiences. This will ensure that student nurses develop experiences that will promote patient safety in clinical practice.

Human resources in the health sector are the most valuable asset and yet a major threat to patient safety when not adequately trained (WHO, 2009:5). Inadequate training, which is characterised by a lack of necessary knowledge, skills, and attitudes to judge situations and make timely decisions, is ranked second among the six priority areas for research on patient safety by the WHO (2009:3). As a result, the WHO (2017:9) suggested that it is necessary to incorporate patient safety into the education and training curricula of health care professionals as well as other identification and implementation of interventions that could close an existing gap and promote good nursing care.

This current research study focused on three pillars identified as priorities that influences student nurses' experiences on patient safety in clinical practice in Lesotho namely: NTI, health care facilities, and nursing regulation. Each will be explored fully in the appropriate sections of the research paper.

In Lesotho, six institutions offer nursing education. The Government of Lesotho owns two of these institutions and operates them as public institutions. The other four institutions operate under the umbrella of CHAL and are run as NTI. These are owned by various Christian denominations in Lesotho but they are all regulated by the LNC under the Nurses and Midwives Act 12 of 1998, and they all use the same curriculum towards their diploma in nursing programmes (Lesotho, 1998:124). It is from this curriculum that patient safety content is taught under specific sections of clinical skills such as moving patients in and out of bed, safe body mechanics, medication administration, and caring for babies – all of which are taught in year one. In year two, student nurses learn about care of mentally disoriented patients and how to protect them from self-harm. In year three, the curriculum addresses patient safety related to surgical interventions.

The diagram below (Fig 2-1) as conceptualised by the researcher, illustrates the interaction of the key role-players in patient safety assurance in clinical practice in Lesotho. It reflects patient safety at the centre of all the aspects of the nursing profession and how each of the different role players relates to each other.



Figure 1-1: The exposition of patient safety role players' interaction

1.3 PROBLEM STATEMENT

During engagement at four CHAL NTI, the researcher observed incidences of negligence resulting from the incorrect care processes from both student nurses and registered nurses. In most of these incidents, demonstration of professional accountability was not evident since documentation or reporting of such incidences was not done, even though the incidents posed harm or risk of harm to patients. In addition to complaints through media regarding the unsatisfactory nursing care, LNC also recorded 43 misconduct cases that were reported against registered nurses (LNC, 2014 - 2016). Examples of such misconduct and negligent actions included administering the incorrect medications, exchanging babies between mothers, burning a patient during a bath, and leaving a confused patient unattended who was later found deceased after absconding from the hospital.

The researcher decided to explore the patient safety experiences of student nurses in their final year of training because these experiences will greatly influence the delivery of patient

care during their professional life. There was minimal representation of written evidence regarding patient safety in the Lesotho context. During the final year, student nurses are expected to have attained competency in patient safety and be able to render safe care as soon as they join employment as registered nurses. The researcher was motivated to conduct research among the CHAL NTI student nurses because these students represent about 65% of student nurses who joined the Lesotho nursing workforce annually. In addition, CHAL NTI are the only institutions directly housed on a campus that also has a hospital that serves as the clinical practice environment.

The evidence above demonstrates a need to explore why patient safety in the CHAL NTI clinical practice environment in Lesotho is not being achieved. The experiences of final year student nurses provided a guiding factor in understanding the reasons why this problem exists despite their theoretical and practical training.

1.4 RELEVANCE OF STUDY

The existing evidence of unsafe nursing care, as reflected by the number and nature of reported cases against registered nurses to the LNC, demonstrates a need to improve the nursing care that patients receive in Lesotho. In 2012, the WHO developed a patient safety training guide to aggressively address patient safety problems, which were considered a public health crisis throughout WHO member states (WHO, 2012:11). The findings of this research will be used to formulate recommendations to enhance patient safety and ensure that patient care rendered, even by student nurses, is safe and compliant to global patient safety standards.

1.5 RESEARCH QUESTIONS

This research sought to answer the questions stated below:

- What are the experiences of final year student nurses from the CHAL NTI regarding patient safety training in clinical practice in Lesotho?
- What recommendations can be formulated for CHAL NTI, clinical practice environments, and the LNC to enhance patient safety during the clinical practice of student nurses in Lesotho?

1.6 THE PURPOSE AND OBJECTIVES OF THIS RESEARCH

The purpose of this research was to explore and describe the experiences of final year student nurses regarding patient safety training in clinical practice in Lesotho.

To achieve the purpose of this research, the following objectives were set:

- To explore and describe the experiences of final year student nurses from CHAL NTI regarding patient safety training in clinical practice in Lesotho.
- To formulate recommendations to CHAL NTI, clinical practice environments, and the LNC in order to enhance patient safety during clinical practice of student nurses in Lesotho.

1.7 RESEARCH METHODOLOGY

Research methodology refers to the steps, procedures, and strategies for gathering and analysing data in research; or the techniques used to structure research and to gather and analyse information in a systematic fashion (Polit & Beck, 2017:685). A description of the research context is also important to ascertain the transferability of research findings.

The researcher chose to apply a qualitative approach since the researcher wished to explore and describe the experiences of participants regarding patient safety training in clinical practice. These participants being the final year student nurses from CHAL NTI. This qualitative approach enabled the researcher to create a deeper understanding of a lesser-known subject in the training of student nurses in Lesotho. The methodology was applied within the paradigmatic perspective of the researcher.

1.7.1 Paradigmatic assumptions of the researcher

A paradigm is explained as a way of looking at a natural phenomenon – a world view that encompasses a set of philosophical assumptions and guides one's approach to inquiry and analysis of data (Polit & Beck, 2017:9). The researcher's paradigm in conducting this research was that of an explorative approach. An explorative approach values the significance of the participant's views (Brink *et al.*, 2012:25) and allows the researcher to view the world through the perceptions and experiences of the participants (Thanh & Thanh, 2015:24). The approach emphasises that a participant's context needs to be understood because reality construction is influenced by socialisation. It is based on this fact that the researcher has a particular interest to explore experiences of final year student nurses from four CHAL NTI regarding patient safety training in clinical practice in Lesotho. Components of the paradigmatic perspective are described as follows: meta-theoretical, theoretical, and methodological assumptions and each are explained in detail below.

1.7.1.1 Meta-theoretical assumptions

Meta-theoretical assumptions explain the researcher's view of the world; they are natural beliefs and therefore cannot be tested (Botma *et al.* 2015:187). The researcher's philosophical assumptions are that of pragmatism, which are concerned with action and change as well as the interplay between knowledge and action (Goldkuhl, 2012:136). The assumptions of man, environment, health, and nursing are described in line with King's goal attainment theory (Caceres, 2015:153-154) and are referred to as:

- Man is an open system in constant interaction with their environment. The term open system suggests that "each system or unit has a boundary that separates internal components from other existing boundaries". Caceres discusses man as a reactive being, responding to the environment (Caceres, 2015:154). In this research 'man' referred to the student nurses and registered nurses who provided care to the patients, who were recipients of care – whether safe or not.
- The environment is the background for the interactions of man. It is divided into internal and external environments. While the internal environment transforms energy so the person can adjust to the external environment. The external environment consists of formal and informal organisations and the nurse is part of this environment (Caceres, 2015:154). In the context of this study, the external environment is the physical infrastructure within which patient care is rendered. The external environment comprises of physical structures, health care commodities and basic equipment, adequate space to prevent overcrowding, adequate staffing, hygiene, and sanitation (WHO, 2017:1). In the context of this research, the environment was the CHAL NTI clinical practice environments where student nurses acquired experiences and skill regarding patient safety during care delivery.
- Health is the state of being whole and functional; that is, to be a human that is social, sentient, rational, reacting, perceiving, controlling, purposeful, action-oriented, and time-oriented. A disruption to this holistic and functional state equates to illness (Caceres, 2015:154). In this research, health refers to the safe care received by the patient at a CHAL NTI clinical practice environment, as the absence of safe care would result in patient harm (or disrupted health).
- Nursing is a process of action, reaction, and interaction by which nurse and patient share information about their perception in the nursing situation. It is a process of human interaction between nurse and patient whereby each perceives the other and the situation

and, through communication, they set goals, explore means, and agree on means to achieve goals (Caceres, 2015:153). In this research nursing means the provision of safe nursing care that upholds the safe culture that protects a patient from avoidable errors of care and patient harm.

1.7.1.2 Theoretical assumptions

Theoretical assumptions are a set of interrelated statements intended to explain several aspects of life according to relevant facts, laws, and principles (Babbie, 2007:43). The clear conceptual definition of key variables promotes understanding of these concepts in this research (Polit & Beck, 2012:130). This clear understanding is necessary because no research occurs in a vacuum; there may be other research conducted regarding patient safety. The researcher must be aware of that and build the arguments on those related researchers' views, and clearly state how this current research relates to other research in the similar area of interest.

1.7.1.2.1 Central theoretical assumptions

This research focused on the experiences of patient safety training during clinical practice of final year student nurses from four CHAL NTI. The researcher regards safe patient care as a paramount measure of quality nursing education received by the student nurses during training.

This research explored the training experiences of final year student nurses from CHAL NTI regarding patient safety training in clinical practice and how these experiences impact on the delivery of safe patient care. The description and interpretation of these training experiences will contribute to the formulation of recommendations that will be made available to the CHAL NTI, health care facilities, and the LNC with the aim to enhance patient safety training in clinical practice in Lesotho.

The following are definitions of the key concepts in this research:

1.7.1.2.2 Definition of key concepts

Near miss: an unplanned event that did not result in injury, illness or damage but was a serious error that could potentially have caused an adverse event, however, failed to do so because of chance or interception (Armstrong, 2010:1; Cooper, 2012:143). For the purpose of this research, the near miss concept refers to any act of error or negligence which almost occurred to a patient but was stopped before it had a negative effect on them.

Adverse event: It is the actual injury (error) which occurred to a patient during the process of receiving nursing care (Davies *et al.*, 2003:40). For the purpose of this research, the concept meant any error or mistake performed by a student nurse or a registered nurse during clinical practice and which left the patient physically or emotionally harmed, thereby threatening the attainment of patient safety.

Student Nurse: The Lesotho Nurses and Midwives Act (Act 12 of 1998) describes a student nurse as an individual enrolled in an accredited Nurses Training Institution (NTI) and who is indexed by LNC as a student nurse regardless of the level of training (Lesotho, 1998:106). For the purpose of this research, the concept refers to an individual admitted to study in the diploma nursing programme and registered in the final year of the nursing programme.

Nursing Education Institution (NEI) or Nurses Training Institution (NTI) refers to a school, college, faculty, department or institute, or any other organisation that provides nursing education to produce nurses who would be qualified to register and be licensed to practice as registered nurses according to the Nurses and Midwives Act (Act 12 of 1998), which governs the profession (Lesotho, 1998:124). For the purpose of this research, the NEI refers to the Christian Health Association of Lesotho (CHAL) Nurses Training Institutions (NTI). These institutions were identified by the researcher as Nurses Training Institutions of higher learning accredited by the Council on Higher Education Lesotho (CHE) and are regulated by LNC to provide nursing education programmes in Lesotho.

Clinical Supervision provides an opportunity for registered nurses, nurse educators, and clinical supervisors to facilitate clinical skills teaching, and assess, support and model professional behaviours of student nurses (Dickson *et al.*, 2006:417; Franklin, 2013:35; Saarikoski, 2002:259-267). This concept is otherwise referred to as clinical accompaniment in other countries (Letswalo & Peu, 2015:352). In this research, there is no specified model of clinical supervision of student nurses, however, it is done primarily by registered nurses, nurse educators, and clinical supervisors. A **clinical supervisor** is a registered nurse who holds a qualification in nursing education and is employed by an NTI to facilitate the clinical teaching of student nurses. This includes supervising, guiding, supporting, and assessing students in the clinical practice environment.

Nurse educator is a registered nurse who holds an additional qualification in nursing education and is employed at the nursing education institution to facilitate classroom teaching and clinical teaching. This includes guiding student nurses on how to plan nursing care, instruct on how to communicate with patients, demonstrate clinical skills, and evaluate the performance of student nurses (Kol & Ince, 2018:36; Masakona, 2013:10; Saarikoski,

2002:340). In the context of this research, nurse educator is a registered nurse who holds a qualification in nursing education, is registered as such with the LNC, and is employed at an NTI to facilitate classroom and clinical teaching of student nurses during clinical practice.

Patient safety is defined by the Canadian Patient Safety Dictionary (Davies *et al.*, 2003:12) as the avoidance and minimisation of risk of harm to patients and providers emanating from the processes of health care to an acceptable minimum through system effectiveness and individual actions (NPSF, 2015:xii; Tella *et al.*, 2014:155). In this research, patient safety is discussed as provision of appropriate training and supervision to student nurses to enable them to provide patient care that does not pose risk of harm to patients during clinical practice.

Clinical practice environment is the place where the theoretical components of the nursing curriculum can be integrated with the practical environment and transformed into professional skills and attitudes while also modelling behaviours within an emotionally safe environment (Papastavrou *et.al* 2015:123; Steven *et al.*, 2014:278). Clinical practice allows student nurses to experience structured and supervised learning experience in the clinical practice environment which involves direct contact with patients. The aim is to allow student nurses to practice under the guidance of registered nurses or nurse educators (NCSBN, 2012). For the purpose of this research, the concept refers to the teaching and learning approach applied in the clinical practice environment where student nurses from four CHAL NTI learn through direct provision of patient care to patients while under the supervision of registered nurses.

In the context of this research, clinical practice environment refers to various places where student nurses are placed for provision of patient care during a clinical practice period. Literature refers to this place as a clinical setting or clinical learning environment (Naidoo, 2018:4).

Registered nurse is an individual certified by LNC after successful completion of a diploma in nursing programme; has passed licensure examinations; and has been duly registered by the LNC according to the Nurses and Midwives Act (Act No 12 of 1998) (Lesotho, 1998:106). In this research, a registered nurse works in a teaching hospital to provide patient care and to supervises, support, mentor, coach, and provide learning opportunities for student nurses to promote safe patient care.

1.7.1.3 Methodological assumptions

The methodological assumptions reflect the researcher's viewpoint regarding good science. It includes the researcher's understanding of the manner in which scientific research should be planned, structured and carried out to comply with the demands of science and directly

influence the quality of the research findings (Botma *et al.*, 2010:188). Brink *et al.* (2012:12) further supported this view by saying that it is about doing research correctly, valuing the findings and implementing them to make the necessary changes in practice, and monitoring the impact of the change to ensure that improvement of quality care is attained. In this research, the methodology helped direct the understanding of a phenomenon from the participants' perspective; helped investigate interaction among individuals; and understand the historical and cultural contexts which people inhabit (Creswell & Poth, 2018:33-34).

1.7.2 Research design

A research design is the plan for gathering data, or addressing a research question (Brink *et al.*, 2012:217; Polit & Beck 2017:741). A research design includes philosophy, strategies of enquiry, and specific methods (Creswell & Poth, 2018:48).

This research study used an explorative, phenomenological qualitative research design (Botma *et al.*, 2015: 194). The purpose of using qualitative research was to help explore, describe, interpret, and understand experiences of final year student nurses from the CHAL NTI with regards to patient safety training during clinical practice in Lesotho. The central phenomenon, allowed student nurses to share their views about the experiences (Creswell & Poth, 2018:104). See table 1-1 for a summary of the research methodology. This section will be discussed in detail in Chapter 2.

Table 1.1 : Summary of the research methodology

DESCRIPTION	METHOD	POPULATION AND SAMPLING	DATA COLLECTION	DATA ANALYSIS	RIGOUR
Objective 1: To explore and describe the experiences of final year student nurses from CHAL NTI regarding patient safety training in clinical practice in Lesotho. Question 1: What are the experiences of final year student nurses from the CHAL NTI regarding patient safety training in clinical practice in Lesotho?	The researcher used reflective essays that consisted of participant's thoughts and feelings regarding patient safety training in clinical practice in Lesotho. (Botma <i>et al.</i>, 2010:193; Holland & Rees, 2010:289; & Potter, 2013:1-3).	Population was N=154 final year student nurses from the four CHAL NTI that were available. Non-probability purposive sampling was used to select the participants for this research. (Botma <i>et al.</i>, 2010:124; Polit & Beck, 2012:738).	Data was collected by the researcher in three NTI. A mediator was used in the one NTI where the researcher is employed. Participants responded to two questions that required them to narrate: firstly, their experiences of patient safety training in clinical practice setting in Lesotho and secondly, to how the experiences	Data was analysed by thematic coding as described by Creswell (2009:198). The researcher read all reflective and made notes categorising them into themes. Data was co-coded by an independent individual.	Trustworthiness was ensured by applying Guba's criterion namely credibility, dependability, transferability, and conformability (Brink, <i>et al.</i>, 2012:172-173; Rossouw, 2013:179-184). The researcher also allowed data to be co-coded by an independent co coder.

DESCRIPTION	METHOD	POPULATION AND SAMPLING	DATA COLLECTION	DATA ANALYSIS	RIGOUR
			influenced their patient care delivery.		
Objective 2: To formulate recommendations to CHAL NTI, clinical practice environments, and LNC in order to enhance patient safety compliance of student nurses in Lesotho.	All available national and international sources of data related to findings based on the student nurses' experiences of patient safety.	Population: All available national and international sources of data. Sample: Conclusion statements made in the consulted literature regarding transformation of patient safety	Literature search related to patient safety and on the student nurses' experiences of patient safety.	Statement synthesis	Deductive and inductive logical reasoning strategies to enhance trustworthiness.

1.7.2.1 Pilot study

A pilot study is a small-scale version of a major study. It is conducted prior to the main study in order to identify and address problems in the practical aspects of the research (Polit & Beck, 2012:195). This research applied a pilot study consisting of five student nurses from one of the four CHAL NTI that had given permission; whose final year student nurses had accepted the invitation to participate in this research; and also met the inclusion criteria. After the ethical clearance was obtained, the researcher contacted the principal of one CHAL NTI to conduct a pilot study. The researcher visited the college and invited the participants who met the inclusion criteria and were willing to participate in this research. Non purposive sampling was used to obtain five participants for the pilot study. This method was appropriate because the researcher did not seek to obtain unique information about the participants but only desired to validate the research questions. The data of participants of the pilot study was not included in the main study.

The purpose of conducting this pilot study was to test the clarity of participation instructions as well as to test if the instructions would yield the amount and quality of information required to answer the research question and satisfy the research purpose. An additional purpose was to determine the duration of time likely to be spent by the participants in writing a reflective essay (Grove *et al.*, 2013:523). A more detailed description of this section is included in Chapter 2.

1.8 ETHICAL CONSIDERATIONS

The researcher accepted the responsibility to conduct this research ethically. The researcher recognised, selected, and abided by specific codes of ethics as stipulated by the local, national, and international institutions described below.

Ethical principles of beneficence, respect and justice were adhered to during this research by being honest and accurate in reporting the sources reviewed and keeping a detailed audit trail. A researcher is ethically obliged to assess the benefits of this research versus the potential harm it could cause, to ensure that the participants' right to be protected against any harm would be maintained (NWU, 2016b:1). The well-being of the participants was ensured by avoiding or minimising any emotional or physical discomfort. The researcher submitted a research proposal and written request to the NWU, HREC. Members of the HREC panel of experts were informed of the benefit of the research study as well as potential risks.

The above-mentioned ethical codes were consciously employed and decided upon and a definite awareness of ethical considerations was maintained throughout the research process. Specific ethical considerations that were adhered to during this research study, will now be described in detail.

Permission to conduct research

Permission to conduct this research was sought in the manner described below.

Ethical clearance was sought from:

- School of Nursing Science Scientific Research Committee (INSINQ) North-West University (NWU) (Potchefstroom Campus) (See Annexure D)
- North-West University Health Research Ethics Committee (HREC) (See Annexure D)
- The Ministry of Health of Lesotho Research and Ethics Committee (MOH REC) (see Annexure C).

Permission to use student nurses from CHAL NTI in this research was sought from the gate keepers (Principals) of the CHAL NTI within which data collection was to take place (see Annexure F).

In order to comply with the ethics of research during data collection, the following principles were taken into consideration.

1.8.1.1 Principle of beneficence

The principle of beneficence imposes a duty on a researcher to minimise harm and maximise benefits (see Chapter 2) (Polit & Beck, 2012:152). It is concerned with freedom from harm, exploitation, or discomfort of the participants whether physical, psychological, emotional, financial, social, or even legal (Brink *et al.*, 2012:35; Grove *et al.*, 2013:174). A research proposal was presented to the team of research experts at the North-West University and the HREC before data collection to ensure that participants were not exposed to an unscientific and unethical process. Written permission to conduct research was obtained from the research committee of the Ministry of Health Lesotho (attached as Annexure C).

1.8.1.2 Principle of Justice

The principle of justice upholds a participant's right to fair treatment without any form of favouritism and that each person should be treated fairly and receive what is due to them (Grove *et al.*, 2013:173). The researcher respected any agreement entered into with the participants in this research.

1.8.1.3 Recruitment of participants

Brink *et al.* (2012:36) further stated that selection of participants should not be based on likeness or prospects of manipulation but should be solely based on reasons directly related to their appropriateness to the research purpose. Those who were not willing to participate would not be punished or subjected to any unfair treatment simply because they did not participate in this research.

1.8.1.4 The right to privacy

Grove *et al.* (2013:172) explains that participants' privacy includes confidentiality and anonymity. Participants were assured that their privacy would be protected and anonymity will be guaranteed at all times. Anonymity in research implies that the researcher does not know to whom responses belong. Absolute anonymity was not possible in this research because the researcher met the participants during data collection, however, confidentiality was adhered to by the researcher.

Confidentiality pertains to the management of personal information that the researcher has direct access to and that this information will not be willingly or intentionally shared with others unless the participant consented to sharing of the information (Botma *et al.*, 2015:17). Information of participants was kept under lock and key after data collection and during transcription and analysis. An electronic version was kept on a password-protected computer.

1.8.1.5 The right to self-determination and autonomy

The right to self-determination and autonomy is based on the ethical principle of respect for persons (Brink *et al.*, 2012:35). It implies that an individual has a right to decide whether or not to participate or even to withdraw without facing any risk of penalty, the researcher fully explained to participants that they are free to participate or not to participate and that they can withdraw from the research at any time.

1.8.2 Informed consent

Informed consent means that participants have adequate information about the research, and they comprehend it as enough to be able to agree or decline participation voluntarily (Polit & Beck, 2012:157). In this research the process of obtaining informed consent was facilitated by an independent person and not a researcher. This was to make sure that participants were not coerced by the researcher in any way (See Annexure F).

1.9 LITERATURE CONTROL

After data collection and analysis were completed, the research findings were compared with relevant literature. This was done in order to compare and validate the research findings with existing research studies.

1.9.1 Prevention of plagiarism

The researcher acknowledges the North-West University's policy to prevent plagiarism (NWU, 2016a:21) and declared adherence to this policy. Complete abstinence from plagiarism was achieved by giving due credit to sources in the text and including bibliographic details of these sources in the list of references. The researcher showed respect for copyrights where applicable by giving credit in the text when diagrams or illustrations were used from other sources and then including bibliographic details in the list of references.

1.10 PROFESSIONAL CAPABILITY

The supervisors for this research were both in academics with research experience. The researcher enrolled into a research methodology class at the North-West University in the academic year 2014 to be better equipped with knowledge of research methods and processes. No conflict of interest existed for any of the researchers with regards to this research.

1.11 CONCLUSION

The experiences of the final year student nurses during clinical practice gathered in this research served as a reflection of the nature of patient safety training in Lesotho. When this awareness is created, the relevant stakeholders will take up their role to prevent patient safety risks and enhance patient safety as well as create mechanisms to manage unsafe care. When all these are achieved then nursing practice will be transformed not only during the practice of student nurses but even beyond the student life.

1.12 DIVISION OF CHAPTERS

The chapters are divided as follows:

- Chapter 1: Overview of the research
- Chapter 2: Research methodology
- Chapter 3: Results, discussion, and conclusions
- Chapter 4: Evaluation of the research and recommendations

CHAPTER 2: RESEARCH METHODOLOGY

2.1 INTRODUCTION

Chapter 1 provided an overview of the research by highlighting the introduction, background, and problem statement of the study. The research purpose, objectives and questions were also explained. Finally, the researcher's paradigmatic assumptions as well as a brief orientation to the research design and methodology were explained.

Chapter 2 provides a more detailed description of the methodology, which includes the research design, population, sampling, and procedures for data collection as well as analysis. Criteria for establishing trustworthiness and ethical considerations are also discussed.

2.2 RESEARCH DESIGN

Research design is a term used to describe an overall plan for gathering data to address a research question so that quality results are obtained, and integrity is enhanced (Brink *et.al.*, 2012:217; Polit & Beck, 2017:741). The design chosen by the researcher for this research was an explorative and descriptive qualitative research design (Botma *et al.* 2015: 194). The design was aimed at exploring and describing the experiences of final year student nurses regarding patient safety training during clinical practice in Lesotho.

The researcher conducted the research within the context of four Christian Health Association of Lesotho (CHAL) Nurses Training Institutions (NTI) in Lesotho. The institutions are owned by various Christian denominations in Lesotho, but they are all regulated by the LNC under the Nurses and Midwives Act 12 of 1998. They all use the same curriculum for their nursing diploma programmes. It is from this curriculum that patient safety content is taught as part of specific clinical skills education such as moving patients in and out of bed; safe body mechanics which is taught in year one as well as medication administration and caring for babies. In year two, student nurses learn about care of mentally disoriented patients and how to protect them from self-harm and finally in year three they address patient safety related to surgical interventions. The selection of this design was based on the nature of the research problem and issues being addressed. In this research, reflective essays provided by the participants were used as the method of data collection because the research was exploring the personal experiences of student nurses.

2.2.1 Qualitative research

Creswell (2014:32) defined qualitative research as an approach that provides for exploration and understanding of the meaning individuals or groups ascribe to a social or human problem.

Qualitative data is collected within the participant's setting, which makes this approach a contextual one because the data is only valid in a specific context (Brink *et al.*, 2012:121; Creswell, 2009:4). The analysis of data in qualitative research escalates from very particular themes to general themes because, by nature, it is inductive (Creswell, 2009:4). Finally, the researcher derives interpretations and meaning from the data.

2.2.2 Phenomenological research

Phenomenological research describes the common meaning found for several individuals in their lived experiences of a phenomenon (Creswell & Poth, 2018:75). Due to its nature of studying direct experiences, the researcher may not allow existing preconceptions to interfere with interpretation. Instead, the researcher must interpret a phenomenon as described by the participants and focus on the meaning of the lived experiences (Scotland, 2012:12). The purpose of phenomenological research was to reduce individual experiences with a phenomenon to a description of the universal sense (Creswell & Poth, 2018:75).

2.2.3 Explorative research

Using explorative research provides an accurate portrayal or account of the characteristics of a particular individual, event or group in real life situations for discovering new meaning, describing what exists, determining the frequency with which something occurs, and categorising information (Burns & Grove, 2009:359).

2.2.4 Descriptive research

The descriptive component of this research was provided through the qualitative approach used to gain insight into the experiences as it occurred naturally (Brink *et al.* 2012:112). In this research, the experiences of final year student nurses regarding patient safety were gathered by means of reflective essays. The reason for using descriptive research was to observe, describe, and document the aspects of a situation exactly as they occurred (Polit & Beck, 2017:206).

2.3 RESEARCH METHODS

Research methods are the techniques that a researcher uses to organise and structure a research in a systematic manner (Polit & Beck, 2012:12). Creswell (2014:23) further expands by giving specific methods that are applicable to a qualitative approach. These methods include sampling, data collection, data analysis, ethical aspects, as well as trustworthiness. In this research, the term methodology refers to how the research was implemented in a logical sequence in exploring and describing the experiences of final year student nurses regarding patient safety training during clinical practice in Lesotho.

2.3.1 Population

The research population is defined as all individuals who meet certain inclusion criteria in a research study (Grove *et al.*, 2013:351) or as the complete set of persons or objects that possess common characteristics that are of interest to the researcher (Polit & Beck, 2012:738). The population for this research was the N=154 final year student nurses from the four CHAL NTI who met the inclusion criteria (see 2.3.2), who were invited to participate in the research (see 2.4.1), and who gave permission to participate.

2.3.2 Sampling process

Sampling is the process of selecting cases to represent the population so that inferences about the population can be made (Polit & Beck, 2012:742; Rossouw, 2013:108). In this research, non-probability purposive sampling was used to select the participants for this research because they were selected for a specific purpose, namely to explore how student nurses experienced patient safety training during clinical practice.

Polit and Beck (2012:738) and Botma *et al.* (2010:124) defined a sample as a subset of the population and selected to represent the population (N=154). The researcher selected a sample of information-rich participants based on key criteria (Creswell & Poth, 2018:158). Purposive sampling was used to select specific participants (student nurses) because they illustrated features that were of interest for the specific research and were seen as knowledgeable about the issues under study (Botma *et al.*, 2010:201). Therefore, the research sample was drawn from the CHAL NTI final year student nurses whose institutions gave the researcher permission to ask the student nurses to participate voluntarily. . The inclusion and exclusion criteria used to select the sample for the research were as follows:

- Student nurses registered at any of the four CHAL NTI
- Student nurses in the final (3rd) year of their nursing training programme
- Student nurses that had accepted an invitation and were willing to give written permission to participate.

Exclusion criteria included the following:

- Student nurses registered in the public NTI
- Student nurses in 1st and 2nd year of nursing training programme.

2.3.3 Sample

A sample is defined as a subset or portion of the total accessible population identified for the research (Botma *et al.*, 2012:124). Polit and Beck (2012:275) also defined it as a subset of population elements, which are most basic units about which data to be collected. In this research, the sample was a portion of final year student nurses from the four CHAL – NTI who were available on the day of data collection, were willing to participate, and gave written permission to participate.

2.3.4 Sample Size

Polit and Beck (2012:742) defined the sample size as the number of research participants. The sample size in this research depended on the number of student nurses who accepted an invitation to participate from a total population of (N=154) student nurses in the four CHAL NTI. A sample size of eighty-seven (n=87) participants wrote essays (Botma *et al.*, 2015:200).

2.4 DATA COLLECTION

This section will include the role of the researcher before data collection, the data collection methods that were used in this research, as well as establishment of the protocol for data collection (Creswell, 2014:189). Grove *et al.* (2013:691) defined data collection as a precise, systematic gathering of information relevant to the research purpose or specific objectives, questions, or hypothesis of a study.

2.4.1 Researcher's role before data collection:

The researcher performed the required pre-data collection role as outlined by Botma *et al.* (2015:203) by gaining permission to enter the setting. In the case of this research, permission was sought by writing letters requesting the principals of each of the four CHAL NTI to allow the researcher to gain access to the sites and students (See Annexure F). Written letters requesting for permission to conduct the research (Annexure F) were sent by the researcher using emails to each of the four CHAL NTI containing the following information, as recommended by Creswell (2014:188):

- Why the site was chosen for the study?
- What activities would occur at the site during the research study?
- What would be expected from the participants?

- What would be expected from the gatekeepers?
- Would the research be disruptive?
- How would the results be reported?
- What would the gatekeepers gain from this research?

The researcher emailed each principal of the four proposed research sites. In this email, the researcher explained the purpose of the research and the process to be followed for data collection. Relevant documents which could help explain this research, were attached in the mail. After the principals decided to allow the researcher to enter the site, they gave researcher a name and contact details of a person who the communication regarding this research would go through. The contact person was a peer of participants and not in a power relationship over participants. This was done to avoid bias. Data collection was scheduled to take a day for each site and that would translate to a period of four days to be completed. A detailed programme (Annexure H) for data collection was developed by the researcher after collaboration with contact people on each site and was forwarded to each site before the commencement of data collection. The researcher also confirmed appointments with each liaising person on a continuous basis.

The researcher also requested ethical permission from the North-West University Health Research Ethics Committee (NWU HREC), as well as from the Ministry of Health of Lesotho (See Annexure C and D).

The researcher visited each of the four data collection sites to introduce the research, and to meet the gate keepers and prospective participants. Participants who met the inclusion criteria were invited to participate in the research. The role of participants in the research was clearly explained, including the research purpose and objectives. The benefits of participating were also discussed (see point 2.7.4) as well as the ethical aspects and confidentiality (see point 2.7.2). At the end of the discussion with prospective participants, the researcher issued written invitation letters to willing participants and allowed them to go and read them with whomever they wished to consult with. A maximum of five working days was given for participants to decide whether they wanted to participate in the research or not.

The researcher arranged that an independent person facilitate the process of obtaining informed consent. This person facilitated the consent process on the day of data collection. The researcher proceeded with data collection once informed consent was granted by participants. The researcher used this strategy at three of the four NTI when collecting data, but from the fourth

institution data was collected by a mediator (see point 2.4.4). The mediator was a neutral party and used because the researcher was employed as an educator at this fourth institution.

Participants were informed that the data collected from them would be kept confidential and that their names would be protected by using numbers as identifiers instead of their actual names.

2.4.2 Researcher's role during recruitment

The researcher wrote letters to the principals of the four CHAL NTI and requested for permission to ask final year student nurses to participate in this research. Each student nurse who met the inclusion criteria was invited to participate in this research by means of an invitation letter (Annexure F). The researcher handed out the invitation letters, which included contact details for the researcher and the mediator to allow the opportunity for participants to ask questions. Participants were given five working days to think about the invitation and to discuss the invitation with the mediator and or the researcher. On the day of data collection, the participants were called in to a previously identified venue where an independent person facilitated the process of obtaining written consent from willing participants.

2.4.3 Setting or Physical Environment

The setting refers to the specific place and the conditions in which data collection takes place in a research (Polit & Beck, 2012: 49,743).

In this research, there were four data collection sites, namely the four individual CHAL NTI. Two of the institutions are around the capital of Lesotho, Maseru, while one is 70 km away towards the north of the country and the other is up in the mountains towards the east of the country. In each of these four CHAL NTI, a classroom with sufficient chairs, desks, and significant lighting was identified for data collection. The setup of this classroom was modified to neutralise the monotony of the usual setting that student nurses are used to during class times. It was, however, arranged in a manner that did not allow discussion between participants in order to prevent sharing of experiences and/or ideas.

2.4.4 Mediator

The researcher identified a mediator who assisted with the process of obtaining consent and data collection at the college where the researcher was employed at the time. The mediator came from another independent institution and is a nurse registered with the LNC. The mediator has a Masters in advanced Midwifery and used a qualitative approach during her scholarly research. Prior to data collection, the researcher explained to the mediator all aspects related to the research. These included the research purpose and objectives, and the instructions for writing

the reflective essay. The method of data collection was also explained to the mediator. A one-page reflective essay was written by the mediator during the pilot study to become familiar with the format.

2.4.5 Pilot study

As described previously, a pilot study is a small-scale version of a major research conducted prior to the main research in order to identify and address problems in the practical aspects of the research (Polit & Beck, 2012:195).

A pilot study was conducted with five student nurses from one of the four CHAL NTI that gave permission and whose final year student nurses had accepted the invitation to participate in this research and met the inclusion criteria.

The purpose of doing the pilot study was to test the participation instructions for clarity as well as test if the instructions yielded the amount and quality of information required to answer the research question and satisfy the research purpose. The pilot also helped determine the duration of time participants would likely spend on writing a reflective essay (Grove *et al.*, 2013:523). The pilot study, reflective writing took up to forty-five minutes. The written essays received, placed more emphasis on the experiences regarding patient safety training and less on the influence that the experiences had on the patient care delivery. Based on this observation, the researcher decided to separate a question that was initially a single question into two questions so that each one would be answered independently and receive adequate attention.

The formulated instructions seemed clear to participants, however the researcher decided to include a key for identification of each site. This was done by writing a name of an NTI on the data collection tool and giving it a code, which participants were to use as a first character on their scripts (see annexure G).

The mediator also participated in the pilot study to become familiarised with the required writing format. The mediator's sample was destroyed. Data collected from participants from the pilot study was not included for analysis.

2.4.6 Data collection strategy / process

The researcher adopted explorative methods in order to yield insight and understanding of behaviour, and explanation of actions from the participant's perspective, and avoiding to dominate the participants. In the explorative approach, a researcher aims at gathering insight and in-depth information as well as the participant's relationship with their context so that socially constructed reality is created (Thanh & Thanh, 2015:6).

In this research the researcher adopted reflective writing as a data collection strategy because it allowed the participants to state freely their experiences about the training of patient safety while in clinical practice.

2.4.6.1 Reflective essay

The researcher used reflective essays as a data collection strategy in this research. Botma *et al.* (2010:193); Holland and Rees (2010:289) and Potter (2013:1-3), describe reflective essays as a form of research that focuses on a long, written description of a story to determine how individuals make sense of events in their lives. The reflective essays obtained by this study consisted of participant's thoughts and feelings about the situations they experienced regarding patient safety training in the clinical practice environment.

The researcher collected data from the three CHAL NTI. Student nurses were placed in a classroom with sufficient light, as well as desks and chairs to enable writing. The researcher requested a mediator, who had no relationship with the participants, to facilitate data collection at the college where the researcher was employed as an educator at the time of data collection. This was to minimise threats to the student nurses' ethical rights and freedom.

2.4.6.2 Preparation

The preparation for the data collection with the reflective essays included the following arrangements:

- Permission to conduct this research was sought from NWU HREC. Permission was granted on 21 September 2018. The Ethics reference number is NWU 00093-17-S1, see Annexure D.
- Permission was requested from NTI Principals to conduct the study. This permission was granted between September and November 2017, see Annexure B.
- Arrangement for a suitable venue: The researcher contacted each of the sites through the phone to make arrangement for a suitable, date and time, venue and equipment.
- Potential participants were notified about the date, time and venue of the writing of the reflective essays by the contact person from each NTI, see Annexure H.
- On the day of data collection, the researcher arrived and a suitable classroom with chairs and sufficient light was identified. Classroom were arranged for participants. Participants arrived and entered the classroom at the agreed time. Introductions were made and a copy of an informed consent was given to each one who wanted to participate.

- Voluntary informed consent: The independent person arranged by the researcher, explained the contents of the informed consent. Participants asked questions and the independent facilitator and the researcher answered them. Participants were then given time to sign the informed consent forms and witnessed for each other. Signed consent forms were collected for the researcher to sign too (see Annexure F).
- The researcher then issued instructions and the questions that participants needed to respond to. Participants were provided with blank pages to write on (see annexure G).
- Participants randomly selected participation codes for identification. Participants were reminded to write the site code and own code, which they picked randomly, on the blank response sheets that were handed out.

Writing process

On the day of data collection, participants from college X (N=54) n=28 gave voluntary consent and were given the following instructions: Write legibly, be honest and do not copy from one another. Write at least a one-page essay.

Adequate time of about 50 minutes as ascertained in the pilot study, was given to participants to reflect and describe their experiences on patient safety training in the clinical practice environment. Essay writing began at 10h30 and ended at 11h20. Participants were assured confidentiality of the data they would provide during the process.

Data collection process continued in the other three NTI (W, Y, and Z). NTI Z (N=36) n=8 participated in the research because half (n=18) of the participants were out in the clinical practice environment on the day of data collection, leaving the researcher with access to the half (18) who were in class on that day. It was from this half that eight were willing to participate. Essay writing began at 17h10 and finished at 18h00. NTI Y (N=30) and n=25 participated and NTI W (N=30) and n=26 participated. Essay writing began at 10h30 and ended at 11h 20 two consecutive days in each of the latter two sites

2.5 DATA ANALYSIS

Reflective essay analysis is defined as a qualitative means of formally analysing text including stories (Grove *et al.*, 2013:700). Reflective analysis further explores form as well as content in order to understand why the story was told in a particular way (Polit & Beck 2012:504).

The data analysis in this research was done following Creswell's thematic analysis (Creswell & Poth, 2018:186). This type of analysis places more emphasis on the content of the text, which is

"what" is said, more than on "how" it was told (Riessman, 2008). The researcher looked at the content of the reflective essays with keen interest to identify common themes and events reported as well as the content of the conversation which allowed the researcher to focus on the meaning of the language used.

Analysis of the essays began during the data collection phase. The researcher went through the steps of organising and preparing the data, developing a general sense of the content, coding the data, describing and identifying themes, representing findings, and interpreting the data (Creswell & Poth, 2018:186).

2.5.1 Process of data analysis

The researcher followed the following process in analysing the essays:

- The essays were read thoroughly to familiarise with the data. At this stage, the researcher noted initial ideas and comments from the data.
- The researcher then generated initial codes systematically for the whole data set.
- Then similar codes were collated to generate themes. Words and themes were used as units of analysis.
- The researcher read the essays several times, underlining the key themes, words and phrases used by the participants.
- All the potential themes that came to the researcher's mind were written down.
- The recurring themes were selected and written down;
- The themes were then grouped into main themes and subthemes.

2.5.2 Co-coding of the essays

Copies of the written essays, including a protocol with guidelines for data analysis, were sent to the identified independent coder (Annexure E). The co-coder analysed the reflective essay scripts independently of the researcher to identify categories and themes. The researcher and co-coder then met to discuss and compare notes and reach consensus about the final themes and categories. Data saturation was obtained with n=57 scripts.

2.5.3 Data storage

Access to the original reflective essays scripts was prohibited to any unauthorised individual who could potentially recognise the handwriting of participants. The hard copies of the completed informed consent forms, as well as the written essays were kept separately to prevent identifying handwritings and linking responses to specific individuals. They will be safely locked in the cupboard in the office of the INSINQ director, at the School of Nursing Science NWU, Potchefstroom Campus for a period not less than five years with limited access to only the researcher and research supervisors.

The data may be destroyed after five years or more in accordance with the NWU policy and regulation on data and record management. The researcher kept the research data in her office only from the date of data collection and until data analysis was completed.

2.6 RIGOUR

Rigour is referred to as trustworthiness in qualitative research. Brink *et al.* (2012:171) defined rigour as strategies employed by the researcher to ensure quality data. Grove *et al.*, (2013:58) describe the characteristics of rigour in qualitative research as openness, methodological congruence, scrupulous adherence to a philosophical perspective, thoroughness in collecting data, consideration of all the data in the analysis process, and understanding of self.

In this research trustworthiness was assured by applying Guba's criterion namely credibility, dependability, transferability, and conformability to ensure that the findings of this research were trustworthy (Brink *et al.*, 2012:172-173; Rossouw, 2013:179-184).

2.6.1 Credibility (truth value)

According to Polit and Beck (2012:585), research findings are considered credible if there is a detailed description of the setting, and components of the population. Credibility in this research was ensured by applying the six measures described by Guba (as cited by Rossouw, 2013:180). These six measures are as follows:

2.6.1.1 Prolonged engagement

This required that a researcher should be entrenched in the research and interact with the participants in order to know their culture and values (Rossouw, 2013:180). The researcher, at the time of the research, was employed as an educator at one of the four CHAL-NTI, and was, therefore, familiar with student nurses and the environment within which they practice during clinical practice as well as the culture during clinical practice. Furthermore, the researcher had

previously worked as a clinical instructor of student nurses in clinical practice and this created an advantage because the researcher was familiar with the environment and conditions within which student nurses practice. Moreover, as soon as the ethical permission was granted, the researcher visited each of the four research sites prior to data collection to meet with the participants and invite them to participate. This created an opportunity for the researcher to familiarise herself with participants and the culture of the participating NTI prior to the actual data collection point.

The researcher also consulted any relevant documentation from each of the NTI that would be useful to give sense to the topic of research and to improve the familiarity with the phenomena and the setting.

2.6.1.2 Examining the phenomena under different circumstances

Examining the phenomena under different circumstances requires that the same phenomena be observed under different circumstances (referred to as time-spatial and value contexts) (Rossouw, 2013:181). This criterion was met in that the research took place at four different CHAL NTI and, as such, enabled the researcher to observe different value perspectives and dimensions of the same phenomena from these four institutions located in different locations and with different participants.

2.6.1.3 Triangulation

Triangulation serves as a way of confirmation of the data by using multiple methods or sources of data collection and or analysis (Rossouw, 2013:181). The researcher adopted an investigator triangulation, which involves the participation of two or more researchers in the same research to provide multiple observations and conclusions (Carter *et al.*, 2014:545). Data collection was done by the researcher in the three of the four NTI while a mediator facilitated data collection at the institution where the researcher was employed at the time. This enabled the researcher to confirm the data collected by different people from different setting and from different participants. In addition, data was collected from four different NTI and this in itself provided an opportunity to triangulate using data sources.

2.6.1.4 Member checking

The researcher engaged in a discussion with the respondents to confirm or validate the interpretations of the data (Rossouw, 2013:181).

When data analysis was completed the researcher went through the written reflective essays again to confirm that the researchers' interpretation of the participants' experiences accurately reflected the participants' viewpoint. The researcher then went back to the participants with the

interpreted version of the participants' experiences and asked them to validate the interpretation made from the essays. It was expected that the respondents would be able to identify their own responses in the report (Botma *et al.*, 2010:231).

2.6.1.5 Peer discussion or debriefing

Peer discussion or debriefing serves the same purpose as member checking, except that it occurs between the researcher and the expert, in this case being the research supervisors (Rossouw, 2013:181). The research process was a collaborative effort between the researcher and the research supervisors and the researcher can confirm that it reflects the consensus of both parties in the methodology adopted. Furthermore, an impartial expert or external auditor in qualitative research and data analysis was consulted to discuss the findings of this research and this individual provided an objective assessment of this research (Botma *et al.*, 2015:232).

2.6.1.6 Negative case analysis or discrepant information:

Negative case analysis is the final measure of credibility, which is achieved by engaging in negative analysis to refine the interpretations and conclusions. It is done by discussing contrary information in order to demonstrate that all possibilities are justified (Botma *et al.*, 2010:231; Rossouw, 2013:181).

2.6.2 Confirmability (Neutrality)

Botma *et al.* (2015:233) referred to confirmability as the degree to which findings are a function solely of the participants and conditions of the research, and not of other motives or perspectives. It should therefore be possible to perform an audit.

The researcher enabled data audit and analysis procedures by making sure that the research process was documented and the original data was kept safe from informants. This was done to help ensure that the research outcomes are the true result of the experiences and concepts of the participants, as opposed to a result of the qualities and preferences of the researcher.

2.6.3 Transferability (Applicability)

Rossouw (2013:182), described transferability in two ways. Firstly, the use of inductive generalisation from the sample to the rest of the population is done provided that data saturation was achieved. The researcher ensured that all written scripts were read until data saturation was achieved and prepared for analysis.

Secondly, that the phenomenon is understood within its own context and therefore it is the researcher's responsibility to provide a thick description of the context and processes within which the research occurred. These aided readers to evaluate the applicability or transferability of the data to other contexts (Polit & Beck, 2012:585).

2.6.4 Dependability

Polit and Beck (2012:585) defined dependability as the stability or reliability of data over time and conditions. This means that the research should yield similar results if duplicated in the same context using the same methods and participants. The researcher achieved dependability by ensuring that all processes of this research were documented in detail to enable duplication at any point in time. Thick descriptions of the research methods created an opportunity for repeating this research (Rossouw, 2013:183).

2.7 ETHICAL CONSIDERATIONS

The researcher followed the ethical principles as explained by Brink *et al.* (2012:34). These principles are described as: respect for persons, beneficence, and justice. These principles are based on human rights which the researcher must protect during research and are detailed as follows:

2.7.1 Approval and permission to conduct research

In order for a research to be deemed ethical, one of the ways used is to ensure that necessary permission is requested and provided by the gate keepers and the ethics bodies within the setting of a research. Therefore the researcher sought for permission through the following process:

- The research proposal was submitted to the INSINQ, School of Nursing Science North-West University (NWU) (Potchefstroom Campus) for a scientific review (See Annexure D)
- The research proposal was submitted to the North-West University (NWU) (Potchefstroom Campus) Health Research Ethics Committee (HREC) (See Annexure D)
- The research proposal was submitted to the Research and Ethics Committee of the Ministry of Health of Lesotho (see Annexure C).
- Permission to use student nurses from CHAL NTI in this research was sought from the gate keepers (Principals) of the CHAL NTI within which data collection was to take place (see Annexures A & B)

In order to comply with the ethics of research during data collection, the following principles were also taken into consideration.

2.7.2 Principle of beneficence

The principle of beneficence imposes a duty on a researcher to minimise harm and maximise benefits (Polit & Beck, 2012:152). It is concerned with freedom from harm, exploitation, or discomfort of the participants whether physical, psychological, emotional, financial, social, or even legal (Brink *et al.*, 2012:35; Grove *et al.*, 2013:174). Before data collection, the research proposal was presented to the team of research experts at the North-West University and the HREC to ensure that participants would not be exposed to an unscientific or unethical process. Written permission to conduct research was also obtained from the research committee of the Ministry of Health Lesotho. The researcher ensured that the research process was documented thoroughly to make it possible to monitor aspects of the research that may pose any discomfort to the participants.

The data that participants provided was kept confidential and could only be accessed by those directly related to this research to protect them from being victimised by educators or clinicians for the information they shared. When the research findings were disseminated, no data linking to participants or institutions was published by the researcher. The reflective essays and the signed consent forms were kept separate to prevent recognition of handwriting and were locked in a cabinet to prevent access by unauthorised individuals.

2.7.3 Principle of Justice

The principle of Justice upholds a participant's right to fair treatment without any form of favouritism and that each person should be treated fairly and receive what is due to them (Grove *et al.*, 2013:173). The researcher respected any agreement entered into with the participants in this research.

2.7.3.1 Recruitment of participants

Brink *et al.* (2012:36) further said that selection of participants should not be based on likeness or prospects of manipulation but should be solely based on reasons directly related to their appropriateness to the research purpose. Those who were unwilling to participate would not be punished or subjected to any unfair treatment due to the fact that they chose not to participate in the research.

2.7.3.2 The right to privacy

Furthermore, Grove *et al.* (2013:172) explained that participants' privacy rights included the right to confidentiality and anonymity. Participants were assured that their privacy would be protected at all times and that anonymity would be guaranteed.

Anonymity in research implies that the researcher does not know to whom responses belong. Absolute anonymity was not possible in this research because the researcher met the participants during data collection, however, data collected from participants was nameless and the researcher did not know the handwriting in the scripts. In addition, the data was processed anonymously.

Confidentiality pertains to the management of personal information that the researcher is directly involved with and that this information is not willingly or unintentionally shared with other people unless if the participant consents to sharing of the information (Botma *et al.*, 2015:17).

According to Botma *et al.* (2015:18), four key areas must be addressed to maintain confidentiality: (1) the content on the data-capturing forms; (2) limited access to data; (3) safe and secure storage of data; and (4) the anonymous reporting of data.

The researcher held the responsibility to keep information confidential as discussed under the section on data storage. Data was coded according to categories and themes as identified during the data interpretation phase. The participants completed the reflective essay anonymously. The researcher also ensured that the participant's names were not on the essays. Instead, numerical labels were used for the reflective essays written by the student nurses. Therefore, the researcher protected the information shared during this research in that no names or identifying elements were used (Brink *et al.*, 2012:35).

2.7.3.3 The right to self-determination and autonomy

This right to self-determination and autonomy is based on the ethical principle of respect for persons (Brink *et al.*, 2012:35). It implies that an individual has a right to decide whether or not to participate or even to withdraw without facing any risk of penalty. Participants should have the opportunity to choose whether or not to participate in the research without coercion (Polit & Beck, 2012:154).

The researcher demonstrated respect to the participants by providing them with information regarding this research and afford them an opportunity to freely and voluntarily give consent to participate or not. This is a strategy of promoting voluntary participation and protecting participants from harm (Brink *et al.*, 2012:213).

Participation to this research was voluntary and no penalty was imposed to those who did not wish to participate. Participants were also informed that they were free to withdraw at any point without any risk of penalty or prejudice if they felt intimidated or refused to give information. The researcher prevented any threats to the population by implementing the right of the participant to self-determination based on the ethical principle of respect for the persons. Informed consent was obtained (Botma *et al.*, 2015:6).

2.7.4 Informed consent

Informed consent means that participants have adequate information about the research, and that they comprehend it enough to be able to agree or decline participation voluntarily (Polit & Beck, 2012:157).

In this research, the process of obtaining informed consent was facilitated by an independent person and not by the researcher. This was to ensure that participants were not coerced by the researcher in any way. The participants were allowed to have witnesses to the fact that the consent process did not have any form of coercion and that their participation was voluntary. The witnesses to the participant were co-participants in this research. The following information was communicated to the participants:

- **Participant status:** Data provided by the participants was used for research purposes only. In this research the data refers to the information obtained from the reflective essays and field notes.
- **Research goals:** the overall goals of the research were stated in understandable terms. In this research the goals are to (1) explore and describe the experiences of final year student nurses from CHAL NTI regarding patient safety training during clinical practice in Lesotho and (2) to formulate recommendations to CHAL NTI, clinical practice environments, and the LNC to enhance patient safety during clinical practice of student nurses in Lesotho.
- **Type of data:** the data collection process required participants to write a reflective essay on one A4 page detailing the experiences that each one had regarding patient safety training in clinical practice in Lesotho. In this research, data was collected by means of the writing of a reflective essay.
- **Nature of the commitment:** participants were instructed to answer two questions that stated: How have you been trained on patient safety in clinical practice? And how has that training impacted on your patient care delivery?

- **Sponsorship:** The participants were informed that this research was not sponsored and that it formed part of an academic requirement in order for the researcher to obtain a master's degree.
- **Participant selection:** participants were informed about the selection process for their participation. In this research, the participants consisted of all final year student nurses registered with any of the four participating CHAL NTI. The participants could choose to participate in the research or decline participation.
- **Potential risks:** participants were informed about potential risks or discomforts (see Table 2.1).
- **Potential benefits:** This research would indirectly benefit the participants (student nurses) as the researcher formulated recommendations to CHAL NTI, clinical practice environments, and the LNC to promote compliance to patient safety during clinical practice of student nurses in Lesotho.
- **Compensation:** The researcher provided participants with snacks, which were served after data collection.
- **Contact information:** During this research, participants were provided with the contact details of the researcher and the NWU Ethics committee to contact in the event of any further questions, comments, or complaints.
- **Feedback:** Copies of this research report will be availed to the college campus libraries after completion of the degree as a form of feedback to the participants after completion of this research.

2.7.5 Benefit-risk ratio

Inherent in the principle of beneficence, research participants have a right to be protected from harm and discomfort (Botma *et al.*, 2015:20). The researcher therefore aimed to do more good than harm to the research participants by ensuring that no form of coercion was used to recruit participants but only those that were willing to voluntarily participate in this research were used.

2.7.5.1 Anticipated risks

This research was classified to carry a medium risk and the extent of the possible risks and prevention thereof are stated in Table 2.1

Table 2.1: Potential risks and their preventive measures.

Possible Risk	Preventive Measures
Physical discomfort in the form of fatigue or boredom. In this research fatigue or boredom was only possible during the writing of the reflective essay and during member checking.	The researcher kept the essay instructions short. The participants could withdraw from the research if he/she did not want to be part of the research anymore. Data collection only took a maximum of an hour, which reduced the chances of fatigue and discomfort due to low blood sugar levels or thirst during reflective essay writing. Refreshments such as a candy and water were provided for participants during the writing process.
Psychological or emotional distress due to self-disclosure or introspection; or fear of the unknown may have been possible in this research.	Confidentiality and privacy were adhered to by the researcher during this research. Information was given to the participants regarding the process and expectations and informed consent was obtained. The participants were informed that they could ask for clarity at any point during the process of data collection. The researcher ensured privacy and confidentiality of responses by ensuring that the researcher and the co-coder adhered to the principles of confidentiality in handling the participants' essays. The researcher used a co-coder for triangulation of data analysis. The co-coder received anonymous data. The data collection took place in institutional campuses where hospitals were located and there were counsellors who participants would be referred to if there was a need for debriefing or support after data collection.
Loss of research time during the essay writing.	The participants were informed about the process and chose to complete the essays at a time that was most convenient for them outside of class lecturing time and at the college premises.

Possible Risk	Preventive Measures
Economic harm due to financial cost incurred for travelling.	Due to the fact that data collection was at the college premises, there was no extra cost incurred by the participants. The researcher travelled from campus to campus. Cost of the pens and paper, candy and water were carried by the researcher.

2.7.5.2 Anticipated benefits

The benefits of this research outweigh the risks. Although there were no direct benefits to individual participants, the nursing fraternity in Lesotho will benefit from the increased knowledge about patient safety in the clinical practice environment.

2.7.5.2.1 Indirect and Direct benefits

Botma *et al.* (2015:4), pointed out that research without social value could harm participants by wasting their time and resources. The aim of this research was to explore and describe the experiences of final year student nurses from CHAL NTI regarding patient safety training in clinical practice in Lesotho. As an indirect benefit, the participants' experiences helped the researcher formulate recommendations to CHAL NTI, clinical practice environments, and the LNC to enhance patient safety in clinical practice during training of student nurses in Lesotho. Direct benefit to the student nurses is noted as knowledge gain and a better understanding of patient safety practices to improve patient care.

2.7.6 Vulnerability of the population

The participants in this research were student nurses while the researcher was an educator of the CHAL NTI. The fact that the researcher was employed at one of the facilities at the time of the research, makes the participants a vulnerable population. This was mitigated by the researcher who did not collect data at the institution of employment. Instead, a neutral mediator was used to facilitate the process of data collection at this particular NTI. However, the researcher personally collected data from the other three CHAL NTI.

Full information about the processes of this research was explained to student nurses, both in writing and verbally, and they were encouraged to ask questions whenever they needed clarification. This was done to promote and respect the participants' right to self-determination and autonomy. Finally, the participants who wished to participate were allowed to sign an

informed consent form voluntarily and freely without any coercion. No form of discrimination or penalty was imposed on those who did not wish to participate in this research.

2.8 CONCLUSION

In this chapter, the research design and methods were described in order to emphasise how the researcher implemented data gathering, sampling, data analysis, strategies to uphold rigour as well as ethical standards. The following chapter will deal with the results, and discussion of findings, where the research findings will be compared and integrated with relevant literature.

CHAPTER 3: RESEARCH FINDINGS, RESULTS, DISCUSSION AND CONCLUSIONS.

Chapter 2 of this research describes the methodology that the researcher used to facilitate data collection in an ethical manner. Trustworthiness was ensured by integrating the principles of rigor during data collection. Data collection was guided by the questions asked by the researcher which participants responded to by writing a reflective essay of their clinical practice experiences regarding the teaching of patient safety. Chapter 3 gives a full description of the research findings derived from the data analysis of participant' responses.

3.1 INTRODUCTION

The following questions served as the basis for data collection through writing of reflective essays by $n=87$ participants:

- How have you been trained on patient safety in clinical practice?
- How has that training impacted your patient care delivery?

Data was collected from the final year student nurses studying at the four CHAL NTI. The researcher asked participants to write at least a one-page, reflective essay to answer the questions posed by the researcher.

Chapter 1 provided an overview of the researcher's personal experience on the phenomenon being studied (see paragraph 1.7.1.2.1). This overview was provided in order to isolate the researcher's views so that the focus could shift to the experiences of participants.

The analysis process was conducted by an independent co-coder who went through the process until themes emerged. The researcher and the co-coder agreed on the themes identified from the analysis process.

3.2 DATA MANAGEMENT AND ANALYSIS PROCESS

The process of data analysis in the context of qualitative research is not regarded as a step in the process because it is done concurrently with data collection (Brink *et al.*, 2012:193). The researcher adopted a qualitative content and thematic analysis approach. This approach is described by Vaismoradi *et al.* (2016:100) as the systematic process of coding; examining for meaning; and, finally, providing the description of the social reality by creating themes. The data collected from the four CHAL NTI research sites was organised per institution in preparation for

analysis. The researcher checked for completeness of participant responses in relation to the two questions that were asked. The reflective essays were read numerous times to deduce the intended meaning of the responses. Notes were made of similarities and emerging themes during the reading process. The researcher then grouped the themes and separated them into foundation or central themes and sub-themes.

The data was also analysed independently by the co-coder, after which the researcher and the co-coder reached consensus regarding the themes and sub themes that emerged from the raw data. The following themes and sub - themes emerged from the experiences of student nurses regarding patient safety training during clinical practice as identified in table 3.1:

Table 3.1: Matrix describing themes and sub-themes that emerged from research data

CENTRAL THEMES	SUB-THEMES
Theme 1. PATIENT SAFETY TEACHING AND LEARNING IN THE CLINICAL PRACTICE ENVIRONMENT AND CLASSROOM	Sub-theme 3.1.1: Approaches used in facilitation of teaching patient safety • Approaches used in theoretical teaching of patient safety in the classroom • Simulation teaching in the laboratory using scenarios • Approaches used to teach patient safety in the clinical practice environment • Value of patient safety during student nurses' training Sub-theme 3.1.2: Willingness to perform duties that promoted patient safety • Willingness of registered nurses and nurse educators to supervise student nurses • Performing within one's role yields quality and safe patient care

CENTRAL THEMES	SUB-THEMES
Theme 2: COMPROMISED PATIENT SAFETY IN CLINICAL PRACTICE	Sub-theme 3.2.1: Theory-practice gap • Patient safety theoretical content differed to clinical practice Sub-theme 3.2.2: Malpractice of registered nurses • Improper role modelling of safe practices by registered nurses • Poor supervision of student nurses by nurse educators and registered nurses • Procedure guidelines and protocols not followed • Non-compliance to infection control principles • Non-compliance to patient safety during medication administration • Negligent and unsatisfactory nursing care given by registered nurses • Registered nurses force student nurses to practice outside their scope of practice. • No respect shown to patients (scolding of patients) Sub-theme 3.2.3: Malpractice of student nurses • Student nurses intentionally not reporting own errors Sub-theme 3.2.4: Lack of protocols/procedural guidelines • Lack of guidelines on patient safety in the clinical practice environment.
Theme 3: NON-CONDUCTIVE CLINICAL PRACTICE ENVIRONMENT	Sub-theme 3.3.1: Infrastructure and resources • Poor infrastructure with hazardous objects and leaking toilets and roofs.

CENTRAL THEMES	SUB-THEMES
	• Shortages of equipment • Lack of adequate number of skilled professionals
Theme 4: OUTCOMES OF CLINICAL PRACTICE TRAINING ON PATIENT SAFETY	Sub-theme 3.4.1: Personal and professional growth resulting from exposure to the clinical practice environment. • Perceives self as safe, competent, and able to provide safe care • Taught to report on issues that affect patient safety, including practice and equipment. Sub-theme 3.4.2: Insufficient preparation which resulted in safety hazards due to loss of competency on patient safety issues • Unfit for independent practice

Table 3.1 is a presentation of the themes and their sub-themes identified.

3.3 DISCUSSION OF THE RESULTS

The next step provided a description of what the participants experienced, and this included verbatim examples

The results obtained from the data analysis process were integrated with literature to culminate in conclusive statements regarding the research objectives that guided the research which intended to:

- Explore and describe the experiences of final year student nurses from CHAL NTI regarding patient safety training in clinical practice in Lesotho.
- Formulate recommendations to CHAL NTI, clinical practice environments, and the LNC in order to enhance patient safety during clinical practice of student nurses in Lesotho.

3.4 THEME 1: PATIENT SAFETY TEACHING AND LEARNING IN THE CLINICAL PRACTICE ENVIRONMENT AND CLASSROOM

Theme 1 grouped three sub-topics around the theme of patient safety teaching and learning in the clinical practice environment and classroom. These sub-themes and the relevant participant comments are described below:

- Sub-theme 1a: Approaches used in facilitation of teaching patient safety

The question of how the student nurses were trained and how they learnt patient safety received clear responses by the participants who indicated that patient safety was actually taught and regarded as a priority.

Student nurses perceived themselves to be prepared both in theoretical contents and in clinical practice. Educators used to teach patient safety theory in the classroom; Case studies were used in simulation; and peer education and supervision by registered nurses and nurse educators was used during provision of care to patients in the clinical practice environment.

The participant input quotes below show how respondents expressed their views on the approaches used in theoretical teaching of patient safety in the classroom. The codes in brackets behind each quote, is an indication of the participant code.

Approaches used in theoretical teaching of patient safety in the classroom

“Patient safety education is what I learned both in the hospital section and classrooms”. (X1996)

“..., so yes, I received training on patient safety” (RW15)

Findings from Tella *et al.* (2015:155), which explored perceptions of student nurses about learning patient safety in an academic setting, revealed that most of the patient safety knowledge was perceived to have been learnt in the academic settings whereas, Lukewitch *et al.* (2015:932) found that student nurses reported to have confidence in patient safety learnt in the clinical setting.

- Simulation teaching in the laboratory using scenarios.

Tella *et al.* 2015:155 further added that simulation-based education has the potential to equip nursing student nurses with affirmative patient safety knowledge, skills, and attitudes before encountering real-life clinical situations.

- Approaches used to teach patient safety in the clinical practice environment.

“some skills are first learnt in the clinical setting even before they could be taught in class and registered nurses take full responsibility of supervising student nurses on them” (RW05)

“Patient safety is taught and practiced by some nurses, but it depends on who the nurse in-charge of the day is” (SY11).

The findings of research conducted in the United Kingdom are consistent with other researches on the similar topic as seen from Tella *et al.* (2015:159), in that the results also found that patient safety taught to student nurses differed according to different settings. In addition, findings of research conducted in the United Kingdom by Steven *et al.* (2014:281) correlated well by suggesting that clinical education varied so much from ward to ward and also depending on who the mentor was. Muthathi *et al.* (2017:5), in research conducted in South Africa, regarded standardisation and consistency in performing procedures as the best practice in reinforcing skill attainment in the student nurses because it reduces incongruence amongst the clinical supervisors pertaining to the execution of clinical procedures. In research conducted by Muthathi *et.al* (2017:6), student nurses stated that the presence of the nurse educators in the clinical area alleviated confusion caused by the lack of standardisation of procedures, however, nurse educators are not always available. The finding relates well with the research finding from Naidoo (2018:102), conducted in South Africa, which indicated a low culture of teaching and lack of staff commitment to student supervision evident by the lack of interest from the clinical nurse in supervising student nurses.

- Student peer teaching and supervision was used

Lastly the participants' quotes regarding supervision by senior student or peers

“Student nurses teach each other the skills because there is no supervision” (X0311)

“....taught and supervised by senior student nurses and registered nurses” (X1128, TTP06, SY10, R27)

In an attempt to bridge the gap caused by supervisor absence, fellow student nurses also functioned as mentors and assessors of fellow student nurses. This correlates with the findings of research conducted in Australia by O' Brien *et al.* (2019:53) where peer support during clinical placements was acknowledged to help some student nurses overcome challenges. Peer supervision and education can be a strategy used to promote learning in a friendly environment where there are minimal threats from registered nurses or educators (O'Brien *et al.*, 2019:52).

- Supervision of student nurses in the clinical practice environment

The participants in this research had diverse experiences regarding supervision during placement in the clinical practice environment.

Some participants reported to have benefited from having supervisors in the clinical learning environment. Participants further indicated that they received supervision when in the clinical practice environment by both nurse educators and registered nurses. They believed that this supervision reinforced the classroom education as well as assisted student nurses to integrate the classroom learning with real patient care. However, the supervision provided was not uniform because it differed depending on who provided it; how it was provided; and the amount of time spent with student nurses in the clinical practice environment.

Other participants, however, felt they were not supervised at all. The experiences also revealed that supervision during clinical practice was offered by different groups of nursing personnel, from nurse educators, clinical registered nurses and even senior student nurses or peers.

The quotes below share experiences as reflected in the responses of participants:

“Supervision by nurse educators is very rare when student nurses are placed in local hospitals and yet supervision becomes 100% when student nurses are placed in external hospitals” (RW23).

“Clinical supervisors are always present in the clinical learning environment” (SY12)

“Supervision and guidance was always available” (RW09 and RW17)

“Supervision was provided by nurse educators” (RW13)

“Learnt how to provide nursing care under supervision of registered nurses and nurse educators” (RW22)

It is, however, significant that some participants viewed the poor supervision as a motivation for independent and self-directed learning.

“Inadequate supervision supported independent learning of drug names and administration techniques resulting in safe drug administration following the five rights” (X#1835).

- Value of patient safety during student nurses' training

The findings of this research also reflected that student nurses were aware of the importance of patient safety both in their training as well as in their clinical practice. This awareness is reflected in the following quotes as extracted from the student essays:

“Patient safety was considered a priority” (RW16)

“Learnt that patient safety, care and comfort should be a priority” (RW23)

Research acknowledges that patient safety is inseparable from the quality of nursing education (Noviyanti *et al.*, 2017:10). As such, patient safety improvement is recognised as a key priority both nationally and internationally (Usher *et al.*, 2018: 83).

3.4.1 Sub-theme 3.1.2: Willingness of registered nurses to perform duties that promoted patient safety

- Willingness of registered nurses and nurse educators to supervise student nurses

Participant responses showed that there were some registered nurses and nurse educators who were enthusiastic and willing to help student nurses learn during clinical practice.

“Some registered nurses are happy to help student nurses” (RW23)

“Registered nurses in all places of my placement, practiced patient safety” (TTP02).

“Safe nurse influences patient safety in the clinical environment” (X#1835)

“...while there are some registered nurses who are willing to help student nurses, others are not” (RW20)

Participant responses indicated that there were some registered nurses and nurse educators who were willing to assist student nurses. O'Brien *et al.* (2019:50) identified, in research conducted in Australia, that the registered nurses who valued student nurses learning were those who provided effective student orientation, structured learning and feedback, and demonstrated positive attitudes as clinical supervisors. O'Brien *et al.* (2019:50) further expanded that student nurses who received structured orientation, learning and feedback perceived this as willingness of supervisors to invest in the supervision process that included them as part of the team.

Concluding statement for Theme 1: While student nurses attested to the fact that they received patient safety training both in class and clinical practice environment, the education given in clinical practice take primacy over the knowledge gained in classroom. Participants did not seem to have had positive experiences regarding supervision in the clinical practice environment. It is clear, therefore, that the quality of the training was not satisfactory due to multiple factors mentioned by participants, such as inconsistent supervision.

The researcher therefore concludes that training on patient safety does indeed exist, but the quality of this training is not satisfactory and there is a need for a complete redesign of patient safety-affirming nursing curricula to enhance positive experiences on teaching and learning about patient safety in CHAL NTI in Lesotho.

3.5 THEME 2: COMPROMISED PATIENT SAFETY IN CLINICAL PRACTICE

The second theme that emerged from the data collected and analysed was the compromised patient safety in the clinical practice environment. Three sub-themes were further derived from the theme, and these are discussed below:

3.5.1 Sub-theme 2a: Theory practice gap

Despite confirmation from participants that they attained patient safety training, five ($n=5$) participants made remarks that there is a difference between what is taught in the class and what is practiced in the clinical area. In this research, participants revealed that the clinical practice environment exposed a gap in the integration of theory and practice in that what was taught or learnt in the classroom was either not implemented or implemented incorrectly in practice. This is evident from the participant quotes below:

“Training is different from one institution to another due to availability of resources and also because registered nurses also come from different institutions, so they do things differently”
(SY18).

“The difference in classroom and clinical teaching confuses us and we end up not knowing what is right or wrong e.g. IM injection is taught in class as a sterile procedure but in clinical we are told it is surgically clean” (SY12)

“I learnt to do things in two ways. The way registered nurses want me to do and when they are absent I would do it differently” (RW28)

“When we do what has been taught in class, registered nurses complain that we waste time, if you do not change, they develop negative attitude towards you” (SY10)

“Classroom teaches ideal, clinical no, when you query as a student you are threatened that your skills logbook will not be signed” (SY16)

These responses demonstrate that, despite education being provided, clinical practice experience seems to overrule the knowledge gained in classroom due to reasons stated by participants above. Research conducted in Canada explored self-reported confidence of undergraduate student nurses on learning patient safety. The findings revealed that, while student nurses reported to be confident about learning patient safety in the clinical practice environment, they realised that the confidence in their skills tends to decline as they progressed through their academic program (Lukewich *et al.*, 2015:933). Steven *et al.* (2014:282) reported a discontinuity between the classroom and the clinical practice reality in that what is considered ideal and safe in the classroom was often contrasted with variations in the clinical practice environment.

Tella *et al.* (2015:156) discovered that student nurses perceived that they learnt most of their patient safety knowledge in the classroom. They, however, explained that the experience in the clinical setting defeated the purpose of classroom-learnt content because things are done differently in practice. Lukewich *et al.* (2015:934) affirms that, while patient safety content is taught in classroom, the clinical practice environment has a more sealing effect on what student nurses will finally take on as their future practices.

A research conducted in the United Kingdom, exploring student nurses' perceptions of learning about patient safety in a classroom, shared that what was perceived safe practice in class was often practiced differently in the clinical setting (Steven *et al.*, 2014:282).

Tella *et al.* (2015:155) expanded to say that this experience caused student nurses to face a series of emotional tensions regarding skill transfer between the training institution and practice settings. Tella *et al.* (2015:154) recommends that evidence-based learning activities about patient safety must be provided in academic settings prior to the placement of student nurses.

The student nurses in the current research had different experiences during their clinical placement, which led to different conceptualisations of patient safety. Steven *et al.* (2014:292) describes this situation as one that creates a disharmony and discomfort for student nurses, and it impinges on their approach of safety for learning.

3.5.2 Sub-theme 3.2.2: Malpractice of registered nurses

The clinical practice environment has become a complex and demanding environment, which ultimately impacts on student nurses' learning. This complex events that happen in the clinical practice environment put the safety of patients at risk (Mansour, 2015:35). The sub-themes below illustrate some events impacting the learning of student nurses and the safety of patients:

- Procedures, guidelines, and protocols to infection control not followed

Responses showed that participants could not learn the practice of infection prevention because it was not adhered to during their clinical experience. Infection control practices, when handling patients, includes a range of activities from hand washing to use of clean equipment and supplies to enhance asepsis, to ensuring cleanliness of the immediate environment of the patients such as proper waste disposal. The experiences of student nurses on this issue reflected poor compliance to infection control:

“Aseptic techniques are not followed” (SY08).

“Nurses in the clinical learning environment do not regard aseptic technique at all, they do not use sterile gloves or packs and this predisposes patients to unnecessary infections” (SY10).

“No aseptic technique during dressings—one dressing pack is shared among two patients” (SY15)

“Hand washing is not done in between patients; I ended up doing the same” (SY15).

Infection prevention practice is fundamental to safe and quality patient care and it is essential to the protection of health care workers and patients from tremendous risks faced in a clinical practice environment (Biniyam *et al.*, 2018:183). However, this research found that, even though infection prevention and control are among the important safety protocols that student nurses should learn in order to prevent nosocomial infection, this does not happen in the clinical practice environment (Steven *et al.*, 2014:279). Common practices described in literature include hand washing, safe use, and disposal of equipment among others (Khan *et al.*, 2017:478; Salem, 2019:424). Research conducted in two hospitals in Lesotho aimed at assessing compliance to tuberculosis infection control guidelines, revealed that registered nurses in Lesotho and other

countries in the Southern Africa region do not follow infection control guidelines (Mugomeri *et al.*, 2015:736).

- Non-compliance to patient safety guidelines during medication administration

Despite the fact that participants agreed that they had been taught how to administer medication safely, they experienced practice that contradicted the education they received in the classroom. Classroom knowledge emphasised observance of “*five rights*” of medication administration. These rights imply that a nurse should ensure that the *right patient* received *the right medication*, in the *right dose*, via the *right route*, and at *the right time* to prevent occurrence of medication errors (Jones & Treiber, 2018:299). Participants in this research agreed that medication errors are a reality in the clinical practice environment. This view is substantiated by the following quotes from participants:

“No identity bands for inpatients” (RW 21)

“Five rights of medication administration is not done and it makes us give wrong medications and we become hazards to patients” (X1835)

“One day a nurse gave a wrong medication to a patient then just gave an antidote and continued with life like nothing happened” (XTDM)

“A senior student infused a patient with elevated blood sugar level with sodium chloride and potassium saying that it is protocol, when a doctor came he was very angry with that act” (X1128)

“A nurse in charge told me to give intra venous medications one day, I gave a patient magnesium sulphate instead of Lasix because the containers were similar” (X03)

“When doing night duty, registered nurses give medications all at once so they [registered nurses] can go to sleep” (X03)

Medication safety has become a major patient safety concern globally (Adhikari *et al.*, 2014:189). Walsh *et al.* (2018:10) indicated that medication errors have become the leading cause of preventable harm to patients. As such, medication administration should be an integral and important aspect of nursing education and practice. This demands that registered nurses training institutions invest more time, resources, and effort into ensuring that student nurses achieve this basic competency.

- Negligent and unsatisfactory nursing care given by registered nurses

Participants in this research shared their experiences on patient safety by saying that registered nurses demonstrated negligence and unsatisfactory care. In research conducted in South Africa by Haskins *et al.* (2014:41), patients also reported to have experienced verbal abuse, rudeness, and neglect by registered nurses. The finding of Haskins research resonates with the current research where participants shared their experiences as follows:

*“Patients are neglected on wet beds without frequent turning and risked developing bed sores”
(SY08)*

“When we do what we have been taught in class, registered nurses complain that we waste time, if you do not change they develop a negative attitude towards you” (SY10).

“Registered nurses are lazy to do work” (X2603).

“...just sat at the registered nurses’ station chatting while us student nurses and the in charge were busy doing some of the duties” (X2603).

“The following night the registered nurse disappeared” (RW18)

“Nurses in the clinical practice environment do not regard patient safety, they complain of workload and that compromises what they have been taught” (X1896)

“Some registered nurses give themselves comfort by not taking care of patients” (RW09).

“Restless patients would be put on restraints or be given sedatives so that they could not disturb registered nurses” (TT1521)

*“I learnt that registered nurses do things to patients for their own comfort and not for patients”
(RW14).*

Sabatino *et al.* (2014:316), in research conducted in Italy, stated that student nurses witnessed some negative behaviour during their clinical practice. One such incidence was where a nurse was continuously singing while a patient was dying and then all the relatives were dismissed. In another instance, a registered nurse used two diapers for bed-bound incontinent patients so that they needed to change diapers less frequently and only when both were soaked.

- Improper role modelling of safe practices by registered nurses during the clinical learning

Student nurses regard registered nurses and educators as role models and that causes student nurses to copy what they do regardless of the action being right or wrong (Sabatino, 2014:314).

Role models may have both positive and negative impact on the development of student understanding and awareness (Sabatino, 2014:314). Positive characteristics of role models are demonstrated in the domains of clinical competency including good clinical reasoning skills, strong communication and teaching skills (Johnson & Hammond, 2018:291). The experiences shared by student nurses show that patients are not safe in the clinical practice environment because guidelines and procedures are not followed as they should be.

“In the clinical practice environment, skills are done in short cuts because nurses say they [the correct skills] take long” (SY11)

“We learn bad things in clinical and it is possible we will continue with them” (SY10)

Research shows that what student nurses learn through socialisation and experiences are considered more memorable than the explicit formal learning. This can have greater impact upon professional development (Johnson & Hammond, 2018:292).

According to Sabatino (2014:314), the clinical practice environment enables student nurses to enhance their knowledge, skills as well as develop ethical and professional values by copying from registered nurses, peers, and nurse educators.

- Poor supervision of student nurses by nurse educators and registered nurses

The following quotes from the participant responses reflect negative supervision experiences during the clinical practice. Participants indicated that there was minimal or no supervision by both nurse educators and registered nurses during clinical practice.

“Educators were always in a hurry to supervise us and not ready to help us, only promising that they will come back” (RW07).

“Teachers (educators) do not care about student nurses’ questions” (XTDM)

“Lack of supervision during student’s performance of sensitive procedures such as administration of insulin” (R27).

“Nurses did not want to supervise student nurses” (RW13)

“Poor supervision by registered nurses in the clinical learning environment” (RW18)

“Supervision was provided by registered nurses who were not competent, or who did not have skills to supervise student nurses” (RW25).

“Educators and clinical supervisors did not provide supervision to student nurses” (RW25)

“... The student nurses do procedure without supervision...” (X0311)

“...the incident happened while the supervisor was absent...” (SY12)

The findings in this research concurred with literature, which revealed that nurse educators or clinical supervisors would leave their student nurses and not spend enough time and energy on their clinical education (Sadeghi *et al.*, 2019:1667). Sadeghi *et al.* (2019:1666) continued to say that student nurses were not able to acquire competence in sensitive skills because clinical supervisors were not competent in such skills themselves. Due to their incompetence, they deterred student nurses from learning these skills. An example from the Sadeghi research is when student nurses requested to be allowed to perform some clinical procedures, such as intra venous insertion or urinary catheterisation, the clinical supervisors would often say “what if a patient gets injured”.

Being supervised once during orientation and finishing an allocation without supervision is a common finding in literature (Kaphagawani & Useh, 2018:107) however, it remained an indication of inadequate or lack of supervision for student nurses (Dehghani *et al.*, 2016:91). Participants in the current research indicated that, during clinical practice, there was minimal or no supervision by both nurse educators and registered nurses. Despite this, some student nurses came out of this situation of absent supervision with positive experiences. As a result of self-learning, some student nurses became more proactive to availing themselves to any educational opportunities that the clinical placement environment provided or had to find their own ways of fitting into a system that wasn't set up. This finding contradicts a finding of a research conducted by Dehghani *et al.* (2016:89), which indicated that student nurses became increasingly autonomous when supervised. Dehghani *et al.*, (2016:90) continued to say that student nurses related their ability to fulfil learning outcomes to strong supervision by nurse educators than by registered nurses.

More than one student supervision model exists in literature for use during student nurse clinical placement, such as the clinical supervisory model, mentor model, facilitation/preceptor model and dedicated education unit to mention a few (Habimana *et al.*, 2016:42). The participants of this research, however, did not seem to identify with any of the models during their supervision. Kaphagawani and Useh (2018:100) asserted that supervision of student nurses during clinical

placement provides support and reduces errors thus ensuring patient safety. Moreover, it assists with the development of professional competence and confidence amongst student nurses (Franklin, *et.al.* 2013:34). Habimana *et al.* (2016:42) confirmed that student nurses who are prepared with the appropriate knowledge and support, are generally able to make appropriate and effective clinical decisions. The researcher concludes, therefore, that lack of supervision during clinical placement is less likely to result in positive results despite the participants in this research stating so.

- Registered nurses make student nurses practice outside the scope of practice

Another challenge faced by student nurses in the clinical practice environment that posed a risk to patient safety was that student nurses would be made to practice what they had not been taught in the classroom as yet. While this could happen, it is expected that student nurses who are exposed with unfamiliar situations should not be allowed to practice in such situations alone but should have a supervisor or mentor to oversee them and ensure that patients are not harmed in the process of receiving nursing care. Participant responses highlighted the following:

“In cases where supervision is provided by registered nurses, it would be required that student nurses perform activities which were not yet taught or are beyond the scope of practice”
(RW27).

“...although it was beyond our scope of practice” (T86)

“As student nurses forcing us to perform things not in our scope of practice” (SY21)

“I tried to convince her that [I] was not competent enough to do it alone but instead she left”
(X03)

The experiences shared by the participants in this research are contradictory to the findings of a research conducted in Australia by O'Brien *et al.* (2019:54) who stated that the clinical placement must match the student scope of practice. Student nurses view violations of professional standards as a clear and obvious indicator of unsafe clinical practice. In research conducted by Sabatino *et al.* (2014:318), student nurses revealed that during clinical placement, the negative scenario grew worse when they had to assist in the violation of vulnerable persons. They clearly stated that, even if they wanted to withdraw, they could not because of the attitudes of those who wanted them to act against professional values, thus offending the student nurses' professional dignity and behaving as bad role models (Sabatino *et al.*, 2014:318).

- No respect (scolding of patients)

The participants shared that during their clinical placement in the clinical practice environment, they learnt that registered nurses were not respectful to patients and that they ill-treated and scolded them [patients]. The participants cited their experiences in this manner:

“So registered nurses did not treat patients with respect and dignity” (RW13)

*“I observed patient ill-treatment such as scolding patients and non-consented restraining”
(RW17)*

This finding correlates with the findings of research conducted in a hospital in KwaZulu-Natal, South Africa, where attitudes of registered nurses were studied. It was found that patients often report verbal abuse and rudeness from registered nurses (Haskins, *et al.*, 2014:40; Sabatino *et al.*, 2014:317).

3.5.3 Sub-theme 3.2.3: Malpractice of student nurses

This sub-theme clearly reflects the outcome of the learning process that took place in the clinical practice environment.

- Student nurses not reporting own errors intentionally

While student nurses were taught in the classroom to report errors, in the clinical practice environment they were taught that it should not be done because, once reported, they would be punished. This non-compliant behaviour ended up happening voluntarily by student nurses even when the decision to report was fully their own. Participants saw reporting near misses or errors as unnecessary.

“One day a colleague of mine was immunizing babies and she gave Tetanus toxoid (TT) instead of Diphtheria, Pertusis and Tetanus (DPT) and we did not report it” (T86)

“When we have done mistakes, we are threatened not corrected due to fear of disciplinary measures such as suspension. We keep quite.....” (X23)

Student nurses in Italy who witnessed adverse events or near misses described their place of practice as unsafe (Stevanin, 2015:928). Research conducted by Steven *et al.* (2014:282) in the United Kingdom, elaborated that student nurses experienced adverse events or near misses during clinical practice, and that they would often witness registered nurses filling in the ‘adverse event’ report form to report the occurrence of the same. Research conducted in Canada by Van Den Kerkhof *et al.* (2017:51) however portrays that, despite the occurrence of near misses in the

clinical practice environment, there is reluctance to report errors or near misses for fear of punishment. Participants in the current research conveyed that not documenting errors performed by registered nurses on patients, and not complying with rules and regulations, had a bad influence and impacted negatively on their provision of safe patient care.

3.5.4 Sub-theme 3.2.4: Lack of protocols/procedural guidelines

Another sub-theme under the theme of compromised patient safety in the clinical practice is that of lack of protocols, procedures and guidelines or lack of knowledge of such guidelines. Under this sub-theme, participants indicated that there were no guidelines or protocols to guide practice and, therefore, they are not followed during practice. Participant responses provide a clear picture that the clinical practice of student nurses is less regulated through formalised systems such as policies or guidelines. This leaves it open to the personal interpretation of registered nurses and nurse educators.

“The lack of guidelines that emphasize the importance...” (AK47)

“...and ignore the set standards of patient care”. (TTP06)

“Policies do not allow me to do all procedures and we even give wrong prescriptions as student nurses” (RW07)

“Training which could have contributed to lack of knowledge of such guidelines even if they exist” (AK47).

“...the sister told me we are time bound, that I should carry on to dressing the wound without scrubbing.” (X1128)

“...complaining that we waste time...” (SY10)

“Bed bath is only done in the morning by registered nurses as a routine, if it happens that it’s omitted, the patient is not bathed at all throughout the day...” (SY20)

Furthermore, Henderson *et al.* (2006:106), Tella *et al.* (2014:1) and Wakefield (2008:31) concur that the aim of nursing education must be the preparation of student nurses who uphold professional regulations that guide the practice of a registered nurse and ensures safe quality patient care. The experience of participants in this research, however, has been contradictory in that practice was not guided by regulatory tools such as policies or guidelines. Nursing regulatory bodies not only recognise student nurses as being accountable for their practice, but also that they are obligated to respect the safety and well-being of their patients (College of Nurses of

Ontario, as cited by Lukewich, 2015:931). The situation in Lesotho is erroneous because the participants in this research clearly state that there are no guidelines and protocols, moreover, in situations where procedure manuals existed, that there was no enforcement of compliance to them.

3.5.5 Sub-theme 3.2.5: Poor culture of reporting and documentation

- Nurses do not report errors or near-misses

Some participants stated that in situations where they experienced occurrence of untoward incidences, registered nurses would not write incidence reports.

“No incident reports” (RW21)

“No documentation when mistakes have happened” (X03)

“When I have done something unsafe I am not report and be corrected on it in fear of the punishment” (AK47)

“Not everything that has to be [was] reported. I report in fear of writing an incidence report or being dismissed from the institution” (AB1612)

Ramos and Calidgid (2018:73) suggested that the first step to ensuring that medical errors are reported is to obtain the administration’s support to assume a non-punitive approach to those who make and report medical errors. In research conducted by Van Den Kerkhof *et al.* (2017:51), the findings revealed that it was difficult to speak up and or question decisions or actions of those in authority simply because they worried about disciplinary action if they made a serious error.

It is acknowledged that effective communication by registered nurses not only forms a backbone of good patient care, but it is also regarded to be a key to ensuring patient safety (Uhm *et al.*, 2019:78). Registered nurses know of different forms and structures of communication, however, reporting patient safety issues still remains a challenge. Student nurses often perceive that they distract registered nurses from patient care and, therefore, they are not able to challenge or report errors. An awareness of their junior position within the practice environment also impedes them from exercising their knowledge over those who are perceived to be in authority (Steven, *et al.* 2014:284). Participants shared their experiences as follow:

“Communication is done both in writing and verbally” participants indicated that reporting was not done due to fear of punishment” (SY09)

“Harsh punishment makes registered nurses not to report” (AK47)

“Poor documentation in the patient’s files due to lack of emphasis during training” (SY18)

“A patient recovered but even then I was told not to report the incidence because the nurse and I would be expelled” (X03)

- The findings of research conducted in tertiary hospitals in KwaZulu-Natal, South Africa, revealed that the dominant barrier to critical incident reporting was the fear of blame, punishment, fear, tension, and conflict (Mjadu & Jarvis, 2018:85).
- Nurses encourage student nurses not to report errors or near misses

As reflected in the above sub-theme, student nurses learnt from experience in the clinical practice environment not to report medical errors for several reasons. The findings of this research, as reflected by the participant responses, provides an example of one of the causes of reluctance to report errors or near misses in clinical practice.

“My senior would tell me to give a patient medications that are not prescribed ...this would be done without signing for it or writing in the patient’s file because of fear of being taken for disciplinary” (TT1521)

This finding reflected that student nurses ended up practicing what was taught in the clinical practice environment by seniors who may be registered nurses or more senior student nurses. In research conducted by Van Den Kerkhof *et al.* (2017:51), registered nurses and other health professionals across health disciplines, reported to have experienced difficulty in speaking up and questioning decisions or actions of those in authority. This experience is similar to the research participants when they reflected that they ended up keeping quiet even when patient lives were in danger. In the research conducted by Usher *et al.* (2017:93), student nurses felt they could approach someone engaging in unsafe practice, however, they also acknowledged that it was difficult to question those with more authority. Steven *et al.* (2014:281) also found that student nurses were aware of power imbalances, which meant that passing or failing a clinical placement was in the hands of the mentor [registered nurse, nurse educator or clinical supervisor]. Student nurses therefore felt they should appease the mentors so that they would not be threatened with failure of the assessments conducted by them.

Concluding statement: The findings under Theme 2 indicated that there was inferior quality of patient safety training including reporting on adverse events. Although peer education could be a positive strategy for learning, it became a dangerous source because it was not monitored. The senior student nurses, as seen in the data for this research sometimes taught junior student nurses the wrong ways of performing skills. Student nurses also indicated that communication on patient safety issues from student nurses to registered nurses was poor because they were afraid of punishment.

3.6 THEME 3.3. CLINICAL PRACTICE ENVIRONMENT

3.6.1 Sub-theme 3.3.1: Infrastructure and resources

The clinical facility infrastructure and resources was identified as the third theme. The two sub-themes under this theme emerged as physical infrastructure and resources. The findings on infrastructure revealed negative issues that contributed to limited safety of patients such as leaking roofs and toilets.

This was confirmed by comments from the participants, which said:

“The toilets are sometimes leaking, so floors will be wet...” (SY13)

“There is poor infrastructure, for example in labour ward there is no privacy...” (SY16)

“I have an experience of leaking water through the ceiling.” (XN2)

Clinical practice environments have been recognised as being potentially harmful to patients and acknowledged as a problem for many years (Usher *et al.*, 2017:90). Melo (2019:138) also found in research conducted in Northern Ireland, that physical infrastructure in the clinical practice environment contributed to patient falls due to slippery floors.

- Shortages of equipment

Shortage of the equipment necessary for patient care also poses a serious risk in the care of patients. Basic, necessary equipment may provide the safe means of providing care to patients during their stay in hospital, however, such equipment is not always available and this is seen from the response of participants who said:

"I was not able to practice what I was taught in class due to inadequate resources" (RW16)

"Good things taught in class cannot be practiced due to lack of resources" (X05)

"Hospital lack of resources influenced my performance of patient safety" (SY11)

"...unable to do what is expected because of unavailability of resources..." (SY18)

"...this is due to inadequate resources we are exposed to..." (XN2)

"In the hospital, one pack is shared among the patients because economy is considered in the hospital..." (SY13)

" no side rails on beds for confused patients and at the end bandages are used as restraints" (SY13)

Haskins et al. (2014:42) found that lack of basic equipment was a reason for poor and unsafe nursing care. Makhakhe (2010:39) found in research conducted in one of the hospitals in Lesotho, that the problem of resources is a reality and is a risk to patient safety. In the findings of Makhakhe's research, it was even reported that one dressing pack was used for fifty patients in a ward.

- Lack of adequate number of skilled professionals

Under the sub-theme of infrastructure and resources, participants highlighted the shortage of staff and/or skilled registered nurses as an issue that significantly impacted the ability of registered nurses to render safe care.

"Due to lack of staff especially nurse educators..." (X23)

"Shortage of staff" (SY16)

"There was shortage of staff for patients who need to be changed positions or turned" (SY19)

"...we do not wash the corpse because of shortage of staff..." (X05)

"Supervision was provided by registered nurses who were not competent" (RW25)

"Lack skilled professionals" (SY19)

The shortage of staff resulted in poor and unsafe care for patients as seen in the response of participants. Another participant qualified the problem further by saying that there might be staff but there is still a shortage of those with necessary skill.

Research conducted in the United Kingdom indicated that staff in organisations where the patient safety culture appeared to be more negative, identified staffing level problems as one of the contributing factors (Steven, 2014:282). Building safer health care has been a global concern, which calls for student nurses to learn evidence-based patient safety competences from their pre-service education (Tella, 2015:154). Institutions must ensure that registered nurses are prepared to embrace a culture of safety by complying to patient safety policies and that they remain accountable for their actions (Neudorfet *al.*, 2008:35-39), including safety hazards, in a non-punitive manner.

Concluding statement: the findings in Theme 3 clearly stated that lack of quality infrastructure standards and the inadequate resources (both equipment and personnel) were a hindrance to patient care being provided in a safe environment by safe and skilled personnel who render care safely in accordance to acceptable standards.

3.7 THEME: 3.4: OUTCOMES OF CLINICAL PRACTICE TRAINING ON PATIENT SAFETY

Theme 3 explored the clinical practice environment given that the intended purpose of placing student nurses in the clinical area is to promote integration of theory and practice so that meaningful learning experiences are attained. However, a greater challenge is created if the intended learning outcome is not achieved.

3.7.1 Sub-theme 3.4.1: Personal and professional growth resulting from exposure in the clinical practice environment.

- Perceives self as safe, competent, and able to provide safe care

Student nurses indicated that the clinical patient safety experience had helped them face challenges of patient care as well as helped them to make a distinction between the right and the wrong actions. The clinical experience relating to patient safety had also equipped them with the knowledge and skills necessary to provide safe care to patients. Their perceived ability to provide safe care and that they have self-confidence in their competency is evident in the participant comments.

"It influenced me to be independent when rendering care to patient" (MAC0808)

"...has taught to be more careful and may be observing before acting..." (SY02)

"I learned that I have to rationalize with everything I know is right so as to do right by the patient..." (SY03)

"Learnt that I should nurse patients with respect and dignity" (TTP05)

"Patient's proper care and comfort and safety are/should be a priority" (RW23)

"It taught me that I should always have a listening ear..." (TT1521)

"to do what is good and safe for the client not what the many are doing" (X111)

In research conducted by Stevanin *et al.* (2015:933), student nurses perceived themselves as prepared for the provision of safe patient care both in theoretical contents and in clinical practice. At the same time, they perceived clinical practice environment to be unsafe.

3.7.2 Sub-theme 3.4.2: Lack of competency in patient safety issues

- Lost competency in doing the right things

Some research participants in the current research shared that the clinical practice environment had a negative influence on their training. They perceived themselves as not being adequately prepared to confidently provide safe care. The researcher drew this conclusion from the following comments:

"No longer sure of what to do anymore and this makes me to inflict danger to patients" (SY15)

"Influence my care to be poor" & "I think I am not ready to be a good nurse" (X05)

"I believe my patient safety training has been inadequate – 9 out of 10 times not everything is done by the book" (XN2)

"All these makes nursing profession to be a lie because what is real is not done" (T86)

"I am no longer competent regarding quality care" (SY08)

"Nursing care has become dangerous ...performance is deteriorating" (SY05).

"Patients die a lot patients will no longer allow student nurses to practice on them" (SY20)

“Doing good seemed not to have any importance situation is demotivating when one wants to do good” (SY09)

Makhakhe (2010:39) supports these findings through research that aimed at assessing the readiness of newly qualified registered nurses to practice. The finding from that research revealed similar sentiments to the current research in that there were comments such as “Things are done shortcut, no equipment”, “the schools have provided enough guidance but we are not able to do what we have learned at school”.

The responses from the current research participants clearly demonstrated that safe patient care is greatly compromised by multiple issues as revealed by this research. Global literature on patient safety and care provided by student nurses and registered nurses also suggested that the clinical practice environment was unsafe (Saarikoski, 2002:341; Stevanin *et al.*, 2015:933; Tella *et.al.* 2015:155). Furthermore, the participants indicated that clinical experience exposed them to circumstances that caused them to lose competency which they had before the clinical placement. Killam *et al.* (2012:476) and DeBourgh and Prion (2012:117) confirmed that the emerging understanding of patient safety by student nurses is shaped by their initial classroom experiences, therefore a student's entry into the real clinical practice environment is influenced by their ability to integrate learning experiences from the classroom and skills laboratory with those that will be encountered during clinical practice. Durgun and Kaya (2018:31) found that professional experience is expected to have a positive effect on patient safety but that most registered nurses in the clinical practice environment do not uphold safety consciousness when rendering care and that this attitude is transferred to student nurses who later practice in the same way.

Concluding statement: The final theme in this research has made it clear that some student nurses had experiences that made them resilient to the negative issues that could have impacted their confidence and ability to provide safe patient care. They reported that the experiences in the clinical practice environment could be contrary to their expectations so they should be mentally and professionally ready to provide safe care despite the prevailing circumstances during clinical practice. Some research participants, however, could not resist the negative influences and, in the end, they lost competency and did not feel ready to provide safe patient care.

3.8 CONCLUSION

It is important that registered nurses obtain a thorough understanding of patient safety concepts during their undergraduate training. This research has found that the perceived patient safety

education that student nurses received during theory classes did not prepare them appropriately to face the challenges of clinical placement. The challenges were made worse by the fact that there were no guidelines or effective supervision for patient safety in practice.

CHAPTER 4: EVALUATION OF THE STUDY, MAIN FINDINGS, LIMITATIONS, RECOMMENDATIONS AND SUMMARY

4.1 INTRODUCTION

In Chapter 3, the researcher analysed the findings of this research and integrated relevant literature when discussing the results. Chapter 4 will deal with the second objective of this research – the intention to formulate recommendations for nursing regulation, nursing education, nursing practice, and research to enhance patient safety in the clinical practice environment and training outcomes of student nurses in Lesotho. The recommendations are based on the results of this research. The evaluation of the research, discussion of limitations and recommendations will conclude this research.

4.2 RESEARCH EVALUATION

The researcher's first-hand observations of patients missing medication doses and receiving incorrect medications, were some of the errors and negligent practice that occurred in the clinical practice environment during student nurses' clinical practice which prompted the desire to engage in this research. Much more to this was the realisation that the errors during patient care delivery occurred also from the registered nurses. If such incidents would be known by the management of the clinical practice environment, such would be reported as malpractice or negligence to the Lesotho Nursing Council (LNC). However, such incidences were not reported by both the student nurses and the registered nurses either to the management of the clinical practice environment or to the nurses training institution (NTI) where the student nurses were enrolled or even in the record of a patient involved.

The above-mentioned practices left patients unsafe and yet they expected to be provided with safe care. Other issues besides the unsafe actions of student nurses and registered nurses also made the situation worse such as absence of guidelines to guide practice, sub-standard infrastructure, and lack of supervision of students during their placement in the clinical practice environment. Students revealed also that the experiences they had in the clinical practice created confusion and in return they feel they lacked confidence in patient care delivery. Clinical supervision of student nurses is required so that student nurses are able to learn clinical skills, but also to model attitudes and professional behaviours from their supervisors who they regard as role models. Literature makes it clear that these attitudes and behaviours are learnt by copying from what these role models do and how it was done. It therefore became a challenge to the researcher to imagine what the student nurses copied and how their behaviours were modelled regarding safe patient care.

Patient safety has become a global concern and due to this fact, efforts are in place to identify key role players and find ways of improving safety of patients in the health care environment. Among the key role players as nursing regulation (Lesotho Nursing Council (LNC), nursing education (CHAL NTI) and the clinical practice environment (affiliated with CHAL NTI) are seen to be more influential in ensuring that the training of the new generation of student nurses are equipped with the patient safety competency when they finish nursing training. In order for the researcher to formulate recommendations to improve this situation, the current experiences of student nurses regarding their patient safety training had to be explored.

The researcher therefore desired to explore whether the training of student nurses regarding patient safety could have been a contributing factor to the quality of patient care delivery in the clinical practice environment after registration with LNC. The research is significant in that it brings to the fore the reality of how student nurses are trained regarding patient safety in order to be able to practice it even beyond life as student nurses. The research went further to formulate recommendations from the outcomes of the research that if followed, could improve the training of student nurses regarding patient safety in the clinical practice environment. The registered nurses that the student nurses would become would be skilled and confident on patient safety practices.

The two major objectives of the research were to explore and describe the experiences of final year student nurses from CHAL NTI regarding patient safety training during clinical practice in Lesotho and to formulate recommendations to CHAL NTI, clinical practice environment and LNC in order to enhance patient safety during clinical practice of student nurses in Lesotho.

The research adopted an explorative, phenomenological qualitative research design and that enabled this research to be able to explore, describe and interpret; in order to understand participants' experiences regarding patient safety training during clinical practice, to allow sharing of the views about the experiences with this phenomenon. Through the writing of essays, the researcher was able to describe the experiences of final year student nurses and map out the recommendations for improvement which will help the nursing regulatory body, CHAL NTI and clinical practice environment enhance patient safety training of student nurses thus improving patient care. The qualitative interpretation of the student nurses' experiences regarding the training of patient safety was done in relation to relevant literature that has been reviewed and integrated in this research.

The research has therefore been able to successfully achieve its main aim. Provision of safe patient care in Lesotho appeared to be a big challenge in the clinical practice environment, however knowledge and understanding of the first-hand experience of the final year student

nurses regarding the training of patient safety during clinical practice will contribute to the formulation of recommendations for improved patient care in the context of CHAL NTI in Lesotho.

4.3 MAIN FINDINGS

The findings reported were derived from analysing the participants' responses in relation to the questions that were asked by the researcher. Each theme and its subthemes were discussed with relevant literature which drove the researcher to drawing conclusions of what the findings meant. The following main findings have been presented in summary as drawn from chapter 3 (paragraph 3.4 - 3.7).

4.3.1 Patient safety teaching and learning in the clinical practice environment and classroom.

The theme patient safety teaching and learning in the clinical practice environment and classroom was discussed in relation with the two sub themes under it which are highlighted below

- Approaches used in facilitation of teaching patient safety

This research found that it is true that student nurses learnt patient safety both in classroom, simulation, and the clinical practice environment. The teaching of patient safety is limited only to lectures in classroom, case scenario in simulation and peer education and clinical supervision during the clinical placement. Despite various approaches of teaching being applied to teach patient safety, student nurses reported that content learnt was not standardized and the approaches used were also not intentional. This erratic approach of training caused the theory learnt in the classroom to fade when they are exposed to clinical practice caused the knowledge gained in classroom to fade away due to unsupervised practice. Peer education appears as a positive strategy in literature that can create a friendly learning environment; it however becomes dangerous if it is not structured and supervised. This research revealed that senior student nurses taught junior student nurses the wrong ways of performing skills with regard to patient safety. The researcher recommends that nurse educators and clinical supervisors of patient safety content should undergo in-service training on patient safety to improve their knowledge on the content and broaden a range of how it can be taught to student nurses.

Patient safety content that needs to be taught to student nurses should also be standardized and distributed throughout the training period to prevent deterioration of patient safety knowledge and skills. Specific approaches of teaching the patient safety content and skills should be identified.

- Willingness to perform duties that promoted patient safety

Student nurses attested to the fact that there are registered nurses and nurse educators who demonstrated willingness to promote patient safety training obtained in the classroom by practicing patient safety oriented care even when the student nurses were placed in the clinical practice environment.

4.3.2 Compromised patient safety in the clinical practice environment

This theme indicates that there are factors occurring in the clinical practice environment that compromise patient safety, and such are discussed below as the subthemes:

- Theory practice gap

The findings of this research revealed also that while training on patient safety occurred both in classroom, simulation and in the clinical practice environment, student nurses experienced theory practice gap which caused confusion on them. This finding revealed that though what was taught in class appeared ideal, it was practiced differently in the clinical practice environment, such as giving medication, without following the five rights of medication administration. At the end, student nurses ended up not knowing what was right and what was wrong.

- Malpractice of Registered nurses

The findings under the second theme indicated that some registered nurses did not practice safe patient care by not practicing what was appropriate such as following the correct principles which was seen from the student nurses' comments that registered nurses were not complying to infection control principles to aid student nurses to copy. This practice in itself made student nurses to conclude that infection control is not so important and thus places patients at a risk of acquiring unnecessary infections.

- Improper role modelling

It is known that one way of teaching is through modelling the required behaviours to the ones who are expected to copy it. In this case registered nurses become role models of safe care to student nurses. When poor role models are the ones responsible for student nurses training, it means the mentees who in this case are student nurses will apply their role models.

- Poor supervision of student nurses by nurse educators and registered nurses

Student nurses reported that registered nurses and nurse educators did not offer appropriate supervision and that made them to come out of the clinical environment without gaining

competency in patient safety. Supervision needs to ensure the implementation of patient safety measures during care delivery.

- Procedure guidelines and protocols not followed

The research findings also indicated that registered nurses did not comply with the infection control and medication administration principles, finally this resulted in negligent and unsatisfactory nursing care given by registered nurses.

4.3.3 Non conducive clinical practice environment

The other reasons that impacted the quality of patient safety training in the clinical practice environment included the poor infrastructure with leaking toilets and roofs and shortages of resources which included equipment and lack of adequate number of skilled registered nurses, nurse educators and clinical supervisors.

- Poor Infrastructure and inadequate resources

Student nurses reported that the quality of infrastructure and resources in the clinical practice environment were substandard. They found that buildings had leaking toilets that caused the floors to be slippery and that increased risk for falls for both patients and personnel.

Student nurses were challenged by the fact that the clinical practice environment seemed like there was no maintenance plan in place for infrastructure and equipment hence the inability to have substandard infrastructure reported for maintenance on time.

Adequacy of resources both equipment and personnel became a big challenge also which led to registered nurses and student nurses improvising by using resources that risked patient safety such as sharing dressing packs to more than one patient, restraining with bandages. Finally, a finding on inadequate number of skilled registered nurses, nurse educators and clinical supervisors led to student nurses practicing without quality supervision which even caused senior student nurses to assume unstructured, unplanned and unmonitored peer supervision to junior student nurses.

4.3.4 Outcomes of clinical practice training on patient safety

The outcomes of patient safety training in the clinical practice environment had two types of experiences of student nurses as reflected by the two sub-themes under that theme. There was a group that felt that the experience gained in the clinical practice environment has made them to grow professionally because they had perceptions that they are able to provide safe care to

patients. There is however another group of student nurses who reported that the experience of patient safety training in the clinical practice environment made them to lose patient safety competency and as a result they do not feel ready to provide safe care. This group felt they are unfit for independent practice even though they are considered to have completed nursing training.

4.4 LIMITATIONS OF THE STUDY

Firstly, the research was only conducted with the final year student nurses and so it cannot be generalised to all the outcomes of the nursing programme. Secondly, this research was only conducted within CHAL NTI which excludes public institutions and it, therefore, cannot be generalised to all nurses training institutions in Lesotho.

4.5 RECOMMENDATIONS FOR NURSING REGULATION, NURSING EDUCATION, CLINICAL PRACTICE ENVIRONMENT AND NURSING RESEARCH

The recommendations are made on the basis of the major findings of this research and are categorised according to the stakeholders responsible for implementation of such a recommendation.

4.5.1 NURSING REGULATION

The key function of regulating nursing education and practice is to ensure that patients are safe during the processes of patient care delivery by registered nurses and student nurses. It was however, found that patient safety does not come across as an important concept in the LNC's documents such as the standards of nursing education and practice. The researcher therefore recommends that the council ensure that patient safety becomes a greater priority in its regulation of nursing education and nursing practice, which could be made evident by the availability of relevant documents. Specific recommendations are as follows:

- To include the topic of patient safety in the regulation tools of the LNC such as education and practice standards.
- To include patient safety as a compulsory exit level outcome in the curriculum of the nursing diploma programme.
- Provide a concise learning programme on patient safety as a compulsory unit of continuing professional development (CPD), which is compulsory for key role players.
- To incorporate structured patient safety content that is to be taught to student nurses during their training. It should indicate key knowledge and skills as well as the appropriate teaching

approaches such as case studies and role plays to use in the classroom; team- based learning in simulation and clinical practice environment; as well as reflections.

4.5.2 NURSING EDUCATION

Nursing education is aimed at preparing student nurses to provide safe nursing care. The following recommendations are made to improve the quality of care rendered in the clinical practice environment by registered nurses, clinical supervisors, student nurses, and nurse educators.

- NTI should take the responsibility to develop patient safety education programmes for CPD to registered nurses who are required to supervise student nurses during clinical practice.
- Nurse educators and clinical supervisors should be enrolled in patient safety short courses (CPD).
- Registered nurses who are supervisors should provide in-service training to empower all other personnel with patient safety knowledge so that they are able to transfer it to student nurses in the clinical practice environment.
- Patient safety should be reflected in the learning outcomes of the module guides so that the platform of content and consistency is maintained throughout the three years of nursing training programme.
- Implement a competency-based curriculum as it allows for use of a variety of teaching-learning strategies in the classroom, simulation, and clinical practice environment.
- The criteria for recruitment of skilled nurse educators and clinical registered nurses as facilitators for supervision of student nurses during clinical practice should include a minimum of two years in the clinical practice area and a qualification higher than that of the student being trained.

4.5.3 CLINICAL PRACTICE ENVIRONMENT

- Clinical practice environment serves an important role in the training of student nurses. It is in that environment where student nurses' clinical skills are sharpened and professional behaviour modelled. It is this fact that makes it mandatory that clinical practice environment becomes a conducive environment for learning as well as modelling the acceptable professional behaviours by complying with the set professional regulations. The following

recommendations have been made by the researcher to enhance the role of the clinical practice environment in the clinical teaching of student nurses.

- An organised and structured orientation programme of the clinical practice environment should be developed. It should be orientated towards student nurses, registered nurses, and nurse educators on the topic of patient safety guidelines according the developed policy by the LNC.
- An infrastructural maintenance plan should be in place for all facilities, clearly stating the procedure for reporting the repair needs.
- A facility committee should be created to ensure that non-functioning equipment is send to the maintenance department and replacement is done accordingly.
- LNC regulations should be used to inform policies and guidelines, which will be used in the clinical practice environments to guide registered nurses, student nurses, and nurse educators during the delivery of safe patient care.

4.5.4 NURSING RESEARCH

The results of this research exposed a number of issues that could be of value to nursing regulation, nursing education, as well as the clinical practice environments. These issues may require further research; the researcher therefore recommends research in the following areas:

- Perceptions of the roles of nurse educators or registered nurses in maintaining safe patient care during student nurses' practice.
- Incidence rates of infections among patients receiving care from the hospitals used as clinical practice environments for clinical practice of student nurses.
- The role of nursing regulation in planning for, maintaining, and evaluating patient safety in the affiliated NTI hospitals of Lesotho.

4.6 CONCLUSION

The aim of the research was achieved. The experiences of student nurses were explored and described according to the point of view of participants. In all four NTI where this research was conducted, different experiences surfaced, and the researcher could draw conclusions after describing such experiences. Student nurses had both negative and positive experiences regarding patient safety training. Some concluded that their clinical practice had been impacted

negatively, while others felt the experiences made them more resilient to the negative influences that exist in the clinical practice environment.

It however remains the challenge for the relevant stakeholders to put systems in place that will ensure that the maximum number of student nurses completing nursing education in Lesotho will be ready to render safe care to patients during their lives as student nurses and beyond. The findings of this research will be made available to the NTI that participated in the research and to other relevant stakeholders. Findings will also be published in a scientific journal.

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ANNEXURE A: LETTERS REQUESTING FOR PERMISSION FROM THE NTI TO INVOLVE STUDENT NURSES IN A RESEARCH



Private Bag X6001, Potchefstroom
South Africa 2520

Tel: 018 299-1111/2222
Web: <http://www.nwu.ac.za>

The Principal Nurse Educator
Paray School of Nursing

Dear Madam

PERMISSION TO INVOLVE THE STUDENT NURSES IN A RESEARCH STUDY

The above subject matter refers. I am Nkaiseng Vivid Sesinyi Ngwane, a registered master student at the North West University (NWU Potchefstroom campus). The title for my research is Experiences of final year student nurses regarding patient safety training during clinical practice in Lesotho. To assist me in gathering data I propose to have the participants write short reflective essay of their experiences regarding patient safety training in clinical practice in Lesotho in order to formulate recommendations to CHAL NTI, Clinical practice environment as well as the regulatory body (LNC). This I have also included my research proposal for further reference. All information obtained during the data collection will be kept strictly confidential. The research is also to be evaluated by the Health Research Ethics Committee of the North-West University (Potchefstroom campus). It would be greatly appreciated if permission is granted to me in this regard.

Yours Faithfully

Mrs. Ngwane NV
Mrs Bornman
Dr. Van Graan

Student researcher
Primary investigator
Co-Supervisor

Private Bag X6001, Potchefstroom
South Africa 2520

Tel: 018 299-1111/2222
Web: <http://www.nwu.ac.za>

Principal Nurse Educator
Roma College of Nursing

Dear Madam

PERMISSION TO INVOLVE THE STUDENT NURSES IN A RESEARCH STUDY

The above subject matter refers I am Nkaiseng Vivid Sesinyi Ngwane, a registered master student at the North West University (NWU Potchefstroom campus). The title for my research is Experiences of final year student nurses regarding patient safety training during clinical practice in Lesotho.

To assist me in gathering data I propose to have the participants write short reflective essay of their experiences regarding patient safety training in clinical practice in Lesotho in order to formulate recommendations to CHAL NTI, Clinical practice environment as well as the regulatory body (LNC). This I have also included my research proposal for further reference.

All information obtained during the data collection will be kept strictly confidential. The research is also to be evaluated by the Health Research Ethics Committee of the North-West University (Potchefstroom campus).

It would be greatly appreciated if permission is granted to me in this regard.

Yours Faithfully

Mrs. Ngwane NV
Mrs Bornman
Dr. Van Graan

Student researcher
Primary investigator
Co-Supervisor

Private Bag X6001, Potchefstroom
South Africa 2520

Tel: 018 299-1111/2222
Web: <http://www.nwu.ac.za>

The Principal Nurse Educator
Scott Hospital School of Nursing

Dear Madam

PERMISSION TO INVOLVE THE STUDENT NURSES IN A RESEARCH STUDY

The above subject matter refers I am Nkaiseng Vivid Sesinyi Ngwane, a registered master student at the North West University (NWU Potchefstroom campus). The title for my research is Experiences of final year student nurses regarding patient safety training in clinical practice in Lesotho.

To assist me in gathering data I propose to have the participants write short reflective essay of their experiences regarding patient safety training in clinical practice during Lesotho in order to formulate recommendations to CHAL NTI, Clinical practice environment as well as the regulatory body (LNC). This I have also included my research proposal for further reference.

All information obtained during the data collection will be kept strictly confidential. The research is also to be evaluated by the Health Research Ethics Committee of the North-West University (Potchefstroom campus).

It would be greatly appreciated if permission is granted to me in this regard.

Yours Faithfully

Mrs. Ngwane NV
Mrs Bornman
Dr. Van Graan

Student researcher
Primary investigator
Co-Supervisor

The Rector
Maluti Adventist College

Dear Madam

PERMISSION TO INVOLVE THE STUDENT NURSES IN A RESEARCH STUDY

The above subject matter refers I am Nkaiseng Vivid Sesinyi Ngwane, a registered master student at the North West University (NWU Potchefstroom campus). The title for my research is Experiences of final year student nurses regarding patient safety training during clinical practice in Lesotho.

To assist me in gathering data I propose to have the participants write short reflective essay of their experiences regarding patient safety training in clinical practice in Lesotho in order to formulate recommendations to CHAL NTI, Clinical practice environment as well as the regulatory body (LNC). This I have also included my research proposal for further reference.

All information obtained during the data collection will be kept strictly confidential. The research is also to be evaluated by the Health Research Ethics Committee of the North-West University (Potchefstroom campus).

It would be greatly appreciated if permission is granted to me in this regard.

Yours Faithfully

Mrs. Ngwane NV
Mrs. Bornman
Dr. Van Graan

Student researcher
Primary investigator
Co-Supervisor

ANNEXURE B: LETTERS OF PERMISSION FROM THE NTI



Roma College of Nursing

P.O. Box 26, Roma 180
Lesotho
Tel. +266 28340486
Cell: +266 59400444

Email: info@rcn.org.ls

Website: www.rcn.org.ls

2ND October, 2017

Ms. Ngwane N.V.
North West University
Private Bag x6001
South Africa 2520

Dear Madam,

RE: GRANTING OF PERMISSION TO CONDUCT STUDY

The Roma College of Nursing Administration received your letter in August 2017 requesting permission to conduct your study with making inquiries amongst the Final Year Nursing Students on the project entitled **"Experiences of Final Year Student Nurses regarding patient safety training in clinical practice in Lesotho"**.

The Administration is pleased to inform you that your request has been accepted and approved by the relevant Institutional structures that authorize the activity of that nature.

You are expected to communicate with the office of the Principal Nurse Educator regarding the proposed dates in order to meet with relevant students for organization purposes. You are expected to share the results of your study with the Institution on completion and you are wished success in your studies.

Sincerely,

M.L. Keketsi-Mokotso (Mrs.) –Principal Nurse Educator Roma College of Nursing





MALUTI ADVENTIST COLLEGE

Private Bag X019
Ficksburg, 9730
South Africa

Tel: +266 2254 0203/11
Fax: +266 2254 0230
Email: malutison@gmail.com

P.O. Box 11
Mapoteng, 250
Lesotho

07.11.2017

Dear Mrs. Ngwane,

Maluti Management Board has given you the opportunity to do your study among the students as requested.

Sincerely,

Amelia Ranotsi

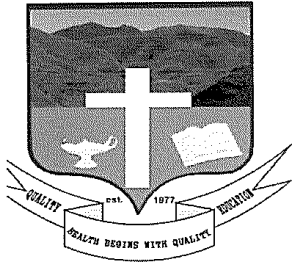
Dr. Amelia Ranotsi

MALUTI ADVENTIST COLLEGE

RECTOR

2017 -11- 07

P.O. Box 11, Mapoteng 250
Tel: 22 540 211
Fax: 22 540 230



PARAY SCHOOL OF NURSING

P.O. Box 2
Thaba-Tseka 550
Lesotho, Southern Africa
+266 22900319 / 27032156

25 September 2017

Mrs N.V. Sesinyi-Ngwane
HREC: NWU-00093-17-S1

Dear Madam

RE: APPROVAL OF THE RESEARCH TITLED: EXPERIENCES OF FINAL YEAR NURSING STUDENTS REGARDING PATIENT SAFETY TRAINING IN CLINICAL PRACTICE IN LESOTHO

This letter serves to inform you that Paray School of Nursing Research Ethics Committee (Paray SON-REC) after having reviewed your protocol hereby authorises you to conduct the study among the specified population. The study is authorised with the understanding that the protocol will be followed as stated, departure from which will constitute a breach of permission.

We look forward to receive a final report at the end of the study.

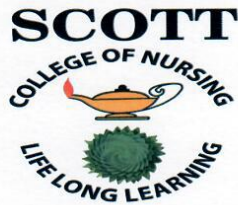
Yours faithfully

Mr L. Kuape | Paray SON REC

Chairperson

Mrs E. Mukurunge | Paray SON REC

Secretary



Private Bag
Moriija 190
Lesotho

Tel: (00266) 52500110/1
Email: scottnursingschl@gmail.com
Website: www.scottcon.ac.ls

30th October 2017

Dear Mrs Nkaiseng Vivid Sesinyi Ngwane

Re: Permission to collect data at Scott College of Nursing

Pertaining the letter that you wrote to Scott College of Nursing, Research Committee grants you permission to collect data for the proposed study titled; **Experiences of final year student nurses regarding patient safety training in the clinical practice in Lesotho**, with the North West University (NWU Potchefstroom campus)

Regards

Makhabiso Ramphoma

on behalf of Research Committee

Principal Nurse Educator

ANNEXURE C: APPROVAL FROM THE MINISTRY OF HEALTH LESOTHO



Ministry of Health
PO Box 514
Maseru 100

05 September, 2017

N. Vivid Sesinyi-Ngwane
Student number-25688014
North-West University

Dear Ms. Nhaiseng Vivid,

Re: Experience of final year student nurses regarding patient safety training in clinical practice in Lesotho (ID115-2017)

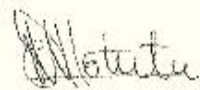
Thank you for submitting the above mentioned proposal. The Ministry of Health Research and Ethics Committee having reviewed your protocol hereby decides that it has the criteria "The study is conducted in an established educational setting involving normal educational practices". The committee exempts the proposal from research and ethics review and authorizes you to conduct the study with the understanding that you agree on the following conditions:

- In the event of changes in material or design or execution of the activity, the Research and Ethics Committee must be consulted through the Research Coordination Unit, MOH.
- The study is conducted among the specified population.
- The study protocol will be followed as stated.

Departure from the stipulated conditions will constitute a breach of the permission. We are looking forward to have a progress report and final report at the end of your study.

Yours sincerely,

Dr. Nyame Letsie
Director General of Health Services


Dr. M. M. Moleetee
Chairperson
National Health Research
and Ethics Committee
(NHLREC)

ANNEXURE D: APPROVAL FROM THE NWU SCIENTIFIC COMMITTEE AND RESEARCH AND ETHICS COMMITTEE



INSINQ Scientific committee proposal review report

Students name: NV Sesinyi-Ngwane

Title of study: Experiences of final year student nurses regarding patient safety training in clinical practice in Lesotho

Reviewers name: Mrs Petro Benadé

	Criterion	Comment
Title	Descriptive, ≤ 12-15 words	Satisfactory
Background	Logical flow, completeness	Satisfactory
Problem statement	Indicate gap in literature Motivation for study	Satisfactory
Research questions, objectives	Flow from problem statement, formulated correctly	Satisfactory
Paradigmatic perspective	Optional for some proposals: theoretical framework if relevant, concepts	Satisfactory
Research design & methods	Type of design, Sampling, data collection and data-analysis best choice to answer research question(s)	Satisfactory. Please refer to comments regarding focus group interviews.
Ethical aspects	All aspects in DoH document* sufficiently addressed	Satisfactory
Completeness of proposal	Proposal, instrument, Informed consent, approval letters	Satisfactory. Please refer to comments on Appendices.
Language & technical style	Note if language is understandable or if language editing is necessary before review or before ethics application	Satisfactory. Language editing will add value but is not essential.
Referencing style	Note if referencing is acceptable or need to be corrected by student according to NWU referencing guide	Satisfactory. Please refer to comments regarding reference list.
Please indicate A, B or C		
Decision	A Approved (I am willing to sign off for ethics application)	B Approved with minor corrections (I do not need to see it again)  Digitally signed by Petronella Benade DN: cn=Petronella Benade, o=North-West University (Potchefstroom Campus), ou=School of Nursing Science, email=Petro.Benade@nwu.ac.za, c=ZA Date: 2017.05.03 12:29:55 +0200
	B Approved with minor corrections (I do not need to see it again)	
	C Major corrections (Proposal needs to be resubmitted for review)	

NDoh, 2015. Ethics in Health Research, Principles, Processes and Structures, 2nd ed.



Ms E Bornman
Nursing
NuMIQ

Private Bag X6001, Potchefstroom
South Africa 2520

Tel: 018 299-1111/2222
Web: <http://www.nwu.ac.za>

Health Sciences Ethics Office for Research,
Training and Support

Health Research Ethics Committee (HREC)
Tel: 018-285 2291
Email: Wayne.Towers@nwu.ac.za

21 September 2018

Dear Ms Bornman

APPROVAL OF YOUR APPLICATION BY THE HEALTH RESEARCH ETHICS COMMITTEE (HREC) OF THE FACULTY OF HEALTH SCIENCES

Ethics number: NWU-00093-17-S1

Kindly use the ethics reference number provided above in all future correspondence or documents submitted to the administrative assistant of the Health Research Ethics Committee (HREC) secretariat.

Study title: Experiences of final year nursing students regarding patient safety training in clinical practice in Lesotho

Study leader: Ms E Bornman

Student: NV Sesinyi-Ngwane-25688014

Application type: Single study

Risk level: Medium (monitoring report required six-monthly)

Expiry date: 30 September 2019 (monitoring report is due at the end of February and August annually until completion)

You are kindly informed that after review by the HREC, Faculty of Health Sciences, North-West University, your ethics approval application has been successful and was determined to fulfil all requirements for approval. Your study is approved for a year and may commence from 21/09/2018. It, however, requires the following further conditions specific to *the progress of the study*:

- a. The researchers must provide the HREC with an amendment request following the pilot test, to indicate any changes that will have to be made to the proposal, especially indicating the duration of completion of the reflective essay.

As the study progresses the aforementioned conditions should be submitted to Ethics-HRECProcess@nwu.ac.za with a cover letter with a specific subject title indicating "Outstanding documents for approval: NWU-XXXXX-XX-XX." The letter should include the title of the approved study, the names of the researchers involved, that the documents are being submitted as part of the conditions of the approval set by the HREC, the nature of the document i.e. which condition is being fulfilled and any further explanation to clarify the submission.

The e-mail, to which you attach the documents that you send, should have a *specific subject line* indicating the nature of the submission e.g. "Outstanding documents for approval: NWU-XXXXX-XX-XX". The e-mail should indicate the nature of the document being sent. This submission will be handled via the expedited process.

Continuation of the study is dependent on receipt of the annual (or as otherwise stipulated) monitoring report and the concomitant issuing of a letter of continuation. A monitoring report should be submitted two months prior to the reporting dates as indicated i.e. annually for minimal risk studies, six-monthly for medium risk studies and three-monthly for high risk studies, to ensure timely renewal of the study. A final report must be

ANNEXURE E: CONFIDENTIALITY CLAUSE FOR THE MEDIATOR AND CO CODER



NORTH-WEST UNIVERSITY
YUNIBESITHI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT

CONFIDENTIALITY UNDERTAKING

entered into between: Mrs NV Sesinyi-Ngwane and the mediator

I, the undersigned

Prof / Dr / Mr / Ms Ms Titi Nelly Nthabane

Identity Number: RC 426210 (PASSPORT)

Address: P.O. BOX 4283, MASERU EAST, 104, LESOTHO

hereby undertake in favor of the **NORTH-WEST UNIVERSITY**, a public higher education institution established in terms of the Higher Education Act No. 101 of 1997

Address: Office of the Institutional Registrar, Building C1, 53 Borchard Street, Potchefstroom, 2520

(hereinafter the "NWU")

1 Interpretation and definitions

1.1 In this undertaking, unless inconsistent with, or otherwise indicated by the context:

1.1.1 "Confidential Information" shall include all information that is confidential in its nature or marked as confidential and shall include any existing and new information obtained by me after the Commencement Date, including but not be limited in its interpretation to, research data, information concerning research participants, all secret knowledge, technical information and specifications, manufacturing techniques, designs, diagrams, instruction manuals, blueprints, electronic artwork, samples, devices, demonstrations, formulae, know-how, intellectual property, information concerning materials, marketing and business information generally, financial information that may include remuneration detail, pay slips, information relating to human capital and employment contract, employment conditions, ledgers, income and expenditures and other materials of whatever description in which the NWU has an interest in being kept confidential; and

1.1.2 "Commencement Date" means the date of signature of this undertaking by myself.

1.2 The headings of clauses are intended for convenience only and shall not affect the interpretation of this undertaking.

2 Preamble

2.1 In performing certain duties requested by the NWU, I will have access to certain Confidential Information provided by the NWU in order to perform the said duties and I agree that it must be kept confidential.

A.Z
T.N.N.
P.S.M
L.M.M

 NWS



NORTH-WEST UNIVERSITY
YUNIBESITHI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT
POTCHEFSTROOM CAMPUS

HREC Stamp

REQUEST TO BE CO-CODER OF MY RESEARCH PROJECT AND CONFIDENTIALITY AGREEMENT

TITLE OF THE RESEARCH PROJECT: Experiences of final year student nurses regarding patient safety training in clinical practice in Lesotho

REFERENCE NUMBER:

RESEARCHER: Vivid Sesiyni-Ngwane (student no 25688014)

ADDRESS:

INSINQ Research focus area

North-West University

Potchefstroom Campus

Private Bag X6001

2520

CONTACT NUMBER: +26658032868

Dear Sir/Madam

I am Vivid Sesiyni-Ngwane from the North-West University (Potchefstroom campus). I am doing research study on "Experiences of final year student nurses regarding patient safety training in clinical practice in Lesotho" as a requirement for the M Cur (Nursing Education)

Handwritten signatures and initials: B, S, SK, and a large signature.

degree. I would like to invite you to act as independent co-coder in this study. To follow is information about the study so that you can make an informed decision.

AIM AND OBJECTIVE OF THE STUDY

The overall aim of this study is to Explore and describe the experiences of final year student nurses regarding implementation of patient safety competencies in clinical practice in Lesotho in order to formulate recommendations to CHAL NTIs, Healthcare facilities as well as the regulatory body (LNC).

Narrative essays will be written by the final year nursing students. You will be expected to analyze the data according to the process of content analysis. You will be expected to follow the following steps during data analysis, namely:

- Ideas and topics must be listed to match the content.
- Organize topics together into columns and cluster similarities together.
- Spend extensive time reading and thinking about the data.
- Code the data. The process of coding involves identifying small topics of information in the text, and then assigning a label to the code. The first level of coding should be descriptive, using participants' phrases as the label for the code.
- Repeat this process with all transcriptions.
- Form themes from the codes, and then organize the themes into larger units of abstraction to make sense of the data.
- Analyze the data together with the researcher.

When you are finished with co-coding, you will be expected to arrange with the researcher for a meeting to reach consensus on the codes, themes, and subthemes that emerged from the data. The research will be conducted under the supervision of experts in Education and Nursing Research at the School of Nursing Science at North West University.

If you have any questions regarding participation in the study, you are welcome to ask me (Vivid Sesyini-Ngwane) or my supervisors (Mrs E Bornman and Dr AC Van Graan) any questions before you decide to give consent. You are also welcome to contact me at +26658032868 or my supervisors at 018 2991717 .

Declaration by the co-coder

By signing below, I BEILINDA SCROOBY agree to be the co-coder in a research study entitled

I declare that:

- I have read this information and consent form and it is written in a language with which I am fluent and comfortable.





SK

Address: Office of the Institutional Registrar, Building C1, 53 Borchard Street, Potchefstroom, 2520

(hereinafter the "NWU")

1 Interpretation and definitions

1.1 In this undertaking, unless inconsistent with, or otherwise indicated by the context:

1.1.1 "Confidential Information" shall include all information that is confidential in its nature or marked as confidential and shall include any existing and new information obtained by me after the Commencement Date, including but not be limited in its interpretation to, research data, information concerning research participants, all secret knowledge, technical information and specifications, manufacturing techniques, designs, diagrams, instruction manuals, blueprints, electronic artwork, samples, devices, demonstrations, formulae, know-how, intellectual property, information concerning materials, marketing and business information generally, financial information that may include remuneration detail, pay slips, information relating to human capital and employment contract, employment conditions, ledgers, income and expenditures and other materials of whatever description in which the NWU has an interest in being kept confidential; and

1.1.2 "Commencement Date" means the date of signature of this undertaking by myself.

1.2 The headings of clauses are intended for convenience only and shall not affect the interpretation of this undertaking.

2 Preamble

2.1 In performing certain duties requested by the NWU, I will have access to certain Confidential Information provided by the NWU in order to perform the said duties and I agree that it must be kept confidential.

2.2 The NWU has agreed to disclose certain of this Confidential Information and other information to me subject to me agreeing to the terms of confidentiality set out herein.

3 Title to the Confidential Information

I hereby acknowledge that all right, title and interest in and to the Confidential Information vests in the NWU and that I will have no claim of any nature in and to the Confidential Information.

4 Period of confidentiality

The provisions of this undertaking shall begin on the Commencement Date and remain in force indefinitely.

5 Non-disclosure and undertakings

I undertake:

5.1 to maintain the confidentiality of any Confidential Information to which I shall be allowed access by the NWU, whether before or after the Commencement Date of this undertaking. I will not divulge or permit to be divulged to any person any aspect of such Confidential Information otherwise than may be allowed in terms of this undertaking;

5.2 to take all such steps as may be necessary to prevent the Confidential Information falling into the hands of an unauthorised third party;

Handwritten signatures and initials: SK, PB, and others.

5.3 not to make use of any of the Confidential Information in the development, manufacture, marketing and/or sale of any goods;

5.4 not to use any research data for publication purposes;

5.5 not to use or disclose or attempt to use or disclose the Confidential Information for any purpose other than performing research purposes only and includes questionnaires, interviews with participants, data gathering, data analysis and personal information of participants/research subjects;

5.6 not to use or attempt to use the Confidential Information in any manner which will cause or be likely to cause injury or loss to a research participant or the NWU; and

5.7 that all documentation furnished to me by the NWU pursuant to this undertaking will remain the property of the NWU and upon the request of the NWU will be returned to the NWU. I shall not make copies of any such documentation without the prior written consent of the NWU.

6 Exception

The above undertakings by myself shall not apply to Confidential Information which I am compelled to disclose in terms of a court order.

7 Jurisdiction

This undertaking shall be governed by South African law be subject to the jurisdiction of South African courts in respect of any dispute flowing from this undertaking.

8 Whole agreement

8.1 This document constitutes the whole of this undertaking to the exclusion of all else.

8.2 No amendment, alteration, addition, variation or consensual cancellation of this undertaking will be valid unless in writing and signed by me and the NWU.

Dated at Potchefstroom this 15 January 2018

Witnesses:

1 [Signature]

2 [Signature]
(Signatures of witnesses)

[Signature]
(Signature)

[Signature] [Signature]
[Signature]
[Signature] SK

- I have had a chance to ask questions to both the person obtaining consent, as well as the researcher and all my questions have been adequately answered.
- I undertake to keep all information relating to this research confidential.

Signed at (place) Potchefstroom on (date) 15 January 2018

 Signature of co-coder
 Signature of witness

Signed at (place) Mapoteng-Lesotho On (date) 26 February 2018

 Signature of researcher
 Signature of witness



NORTH-WEST UNIVERSITY
 YUNIBESITHI YA BOKONE-BOPHIRIMA
 NOORDWES-UNIVERSITEIT

CONFIDENTIALITY UNDERTAKING

entered into between: MrsNV Sesityini-Ngwane and the co-coder

I, the undersigned

Prof (Dr) Mr / Ms B. SCROOBY

Identity Number: 7309110023080

Address: School of Nursing Science, P/Bag x6001, Potchefstroom

hereby undertake in favor of the NORTH-WEST UNIVERSITY, a public higher education institution established in terms of the Higher Education Act No. 101 of 1997

B
 B
 SK

ANNEXURE F: INFORMED CONSENT DOCUMENTATION FOR THE FINAL YEAR STUDENT NURSES FROM CHAL NTI



HREC Stamp

TITLE OF THE RESEARCH STUDY: Experiences of final year student nurses regarding patient safety training in clinical practice in Lesotho

ETHICS REFERENCE NUMBERS: NWU-00093-17-S1

PRINCIPAL INVESTIGATOR: Dr. Elsabe Bornman

POST GRADUATE STUDENT: Nkaiseng Vivid Sesinyi-Ngwane -25688014

ADDRESS: North West University, School of Nursing Building

INSINQ Research focus area

North- West University

Potchefstroom Campus

Private Bag X6001

2520

CONTACT NUMBER: 018 2991831

You are being invited to take part in a research study that forms part of my masters in nursing (Cur) health science education studies. Please take some time to read the information presented here, which will explain the details of this research. Please ask the researcher or person explaining the research to you any questions about any part of this research that you do not fully understand. It is very important that you are fully satisfied that you clearly understand what this research is about and how you might be involved. Also, your participation is entirely voluntary and you are free to say no to participate. If you say no, this will not affect you negatively in any way whatsoever. You are also free to withdraw from the research at any point, even if you do agree to take part now.

This research is going through the approval processes by the Health Research Ethics Committee of the Faculty of Health Sciences of the North-West University and will be conducted according to the ethical guidelines and principles of Ethics in Health Research: Principles, Processes and Structures (DoH, 2015) and other international ethical guidelines applicable to this research. It might be necessary for the research ethics committee members or other relevant people to inspect the research records.

1.1 What is this research study all about?

The purpose of this research is to: Explore and describe the experiences of final year student nurses regarding implementation of patient safety competencies in clinical practice in Lesotho in order to formulate recommendations to CHAL NTI, Healthcare facilities as well as the regulatory body (LNC).

This research will be conducted in the four (4) CHAL NTI in Lesotho and will involve writing of a one page personal reflection about your clinical experience of patient safety training during your clinical practice as a student nurse. This research will be facilitated by an experienced health researchers trained in reflective essay writing and has also used this method in during his/her research. 120 participants will be included in this research.

1.2 Why have you been invited to participate?

You have been invited to be part of this research because you are in the final year of training as a nurse and the researcher believes that you have necessary knowledge to participate.

You also fit the research because you are as student nurse from the CHAL NTI.

You will not be able to take part in this research if you are not a final year student nurse or if you are not studying in the CHAL NTI.

What will be expected of you?

You will be expected to write at-least a one page explaining what your clinical experiences have been regarding patient safety training in clinical practice.

You will provide your experiences by writing a short reflective essay of your experiences regarding patient safety training in clinical practice in Lesotho in order for the researcher to be able to formulate recommendations to CHAL NTI, Clinical practice environment as well as the regulatory body (LNC). *How will we protect your confidentiality and who will see your findings?*

Anonymity of your findings will be protected by not using names or other identifying descriptor but instead numbers will be allocated to the reflective essays. Access to the original essay scripts will be prohibited to any unauthorised individual who may recognise the handwriting. The reflective essays and informed consent forms will be kept under lock and key and will be kept separate to prevent linking them for a period not less than five (5) years with limited access to only the researcher and research supervisor. The data may be destroyed after five (5) years or more in accordance with the universities policy and regulation on data and record management. The electronic recordings and transcriptions will be saved on a password protected computer and a backup of all electronic data will be done on an external drive stored in the researcher's director's office of INSINQ until data analysis and the research are completed and then deleted.

What will happen with the findings or samples?

The findings of this research will only be used for this research.

How will you know about the results of this research?

We will give you the results of this research when data analysis is complete and a research report is compiled by means of an oral presentation as well as giving a copy of the findings to the institution library.

You will be informed of any new relevant findings by during the process of data analysis and if there will be any information obtained from the written essays that may seem unclear, the researcher will conduct a focus group interview to get clarity on such information.

Will you be paid to take part in this research and are there any costs for you?

This research is fully funded by the researcher who is a student at this university. Your participation in this research will not attract any remuneration which means that you will not be paid to take part in the research because there is no funding for other sources except the student herself. However in case you are required to travel during this research travel expenses will be paid for those participants who have to travel to the site. Refreshments will be served during data collection. There will thus be no costs involved for you, if you do take part in this research.

Is there anything else that you should know or do?

You can contact Vivid Ngwane at +266 58032868 or nkaisengvid@yahoo.co.uk if you have any further questions or have any problems.

You can also contact the Health Research Ethics Committee via Mrs Carolien van Zyl at 018 299 1206 or carolien.vanzyl@nwu.ac.za if you have any concerns that were not answered about the research or if you have complaints about the research.

You will receive a copy of this information and consent form for your own purposes.

Declaration by participant

By signing below, I agree to take part in the research study titled: Experiences of student nurses regarding patient safety training in clinical practice in Lesotho.

I declare that I have read this information/it was explained to me by a trusted person in a language with which I am fluent and comfortable. The research was clearly explained to me. I have had a chance to ask questions to both the person getting the consent from me, as well as the researcher and all my questions have been answered.

I give permission that the information I am going to provide in a form of a written essay and or a focus group interview may be used as data for this research. I also understand that the focus group interview will be tape recorded.

I understand that the data will be included in the report and that confidentiality will be ensured by the researcher as no identifying information will be included in anyway.

I understand that taking part in this research is voluntary and I have not been pressurised to take part. I may choose to leave the research at any time and will not be penalised or handled in a negative way if I do so.

I may be asked to leave the research before it has finished, if the researcher feels it is in the best interest, or if I do not follow the research plan, as agreed to.

I understand that there is no incentive or whatsoever personal benefit that I will gain from participating in this research except that the data I will provide may generate information that will benefit the nursing profession in Lesotho.

Signed at (place) on (date) 2018.

Signature of participant

Signature of witness

Declaration by person obtaining consent

I (name) declare that: I clearly and in detail explained the information in this document to

I did/did not use an interpreter.

I encouraged him/her to ask questions and took adequate time to answer them.

I am satisfied that he/she adequately understands all aspects of the research, as discussed above. I gave him/her time to discuss it with others if he/she wished to do so.

Signed at (place) On (date) 2018.

Signature of person obtaining consent

Signature of witness

Declaration by researcher

I (name) declare that: I explained the information in this document to Or I had it explained by who I trained for this purpose. I did/did not use an interpreter. I encouraged him/her to ask questions and took adequate time to answer them or I was available should he/she want to ask any further questions or the person asked to collect data will answer any question regarding this research.

The informed consent was obtained by an independent person at the college where the researcher is currently working while from other NTI the researcher obtained informed consent from all the participants.

I am satisfied that he/she adequately understands all aspects of the research, as described above.

I am satisfied that he/she had time to discuss it with others if he/she wished to do so.

Signed at (place) on (date) 2018.

Signature of researcher

Signature of witness

ANNEXURE G: DATA COLLECTION TOOL AND INSTRUCTIONS

DATA COLLECTION TOOL FOR A RESEARCH STUDY TITLED:

Experiences of final year student nurses regarding patient safety training in clinical practice in Lesotho.

Instructions:

Write at-least one page in response to the questions below.

Write on your answering script the level of your study in nursing

From the CHAL-NTI written below write the code representing the NTI you are studying from. E.g.
CHAL NTI - A

CHAL NTI:

Maluti Adventist College: X

Paray School of Nursing: Z

Roma College of Nursing: W

Scott college of nursing: Y

As a participant in this research please write an essay reflecting back on your 3 years' experience of training as a student nurse to respond to the questions below:

How have you been trained on patient safety in clinical practice?

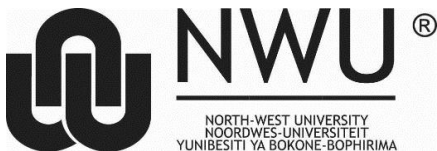
How has that training influenced your patient care delivery?

Thank you for your Participation

ANNEXURE H: 4 DAYS DETAILED PROGRAMME FOR DATA COLLECTION

Date	Data collection site	Start time	Finish time
24 th September 2018	Paray School of Nursing	17h10	18h00
25 th September 2018	Roma College of Nursing	10h30	11h15
26 th September 2018	Scott College of Nursing	10h30	11h15
27 th September 2018	Maluti Adventist College	10h30	11h20

ANNEXURE I: DECLARATION OF THE CO CODER



Vivid Sesinyi-Ngwane
Student number 25688014

PrivateBagX1290, Potchefstroom
South Africa 2520

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Fax: 018 299-4910
Web: <http://www.nwu.ac.za>

School of Nursing Science

Tel: 0182991833
Fax: 018299182
Email: Belinda.Scrooby@nwu.ac.za

2nd October 2019

Dear Vivid Sesinyi-Ngwane

CO-CODING COMPLETED FOR DATA

I hereby confirm that data were co-coded by myself for student Vivid Sesinyi-Ngwane(student number25688014) with title: **Experiences of final year student nurses regarding patient safety training in clinical practice in Lesotho.**

Yours sincerely

Dr Belinda Scrooby
Senior lecturer: Anatomy

ANNEXURE J: EDITING DECLARATION



EDITING DECLARATION

This document certifies that the dissertation listed below was edited for proper use of English language, grammar, punctuation, spelling, and overall style. The same dissertation was edited for the correct use of Harvard referencing style according to the requirements of the North-West University.

Neither the research content nor the student's intentions were altered in any way during the editing process. The student was given the ability to accept or reject all suggestions and changes. The student is responsible for the final, correct presentation of the content, illustrative materials, tables, arrangement of parts, sentence structure, grammar, paragraphing, punctuation, spelling, typographical errors, quotations, bibliographical items, and all information contained within.

Title

Experiences of final year student nurses regarding patient safety training during clinical practice in Lesotho

Author

N.V. Sesinyi-Ngwane: orcid.org/0000-0003-4568-7865

Date Edited

25 October 2019

Editor

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Master of Arts in Business Communication, 2005 (North-West University)

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The editing declaration may be verified with the editor at either of the following contact methods:

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ANNEXURE



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TO WHOM IT MAY CONCERN

18 November 2019

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Yours sincerely

Dr Elsabe Bornman
Supervisor

ANNEXURE

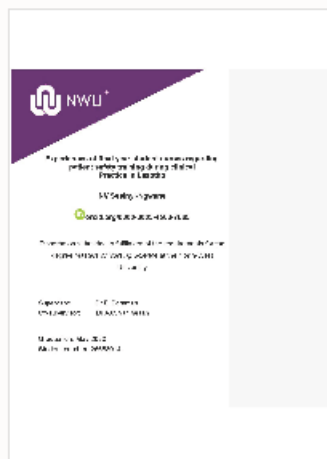


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