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IDENTIFICATION OF THIRD YEAR MIDWIFERY SKILLS THAT COULD BENEFIT FROM SIMULATED PRACTICE PRIOR TO CLINICAL MIDWIFERY PLACEMENTS

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A research report submitted to the Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, in partial fulfilment for the degree of Master of Science in Nursing

Johannesburg,2020

DECLARATION

I, Kerry-Ann Singaram, declare that this Research Report is my own work and that all the sources quoted have been indicated and acknowledged by means of complete references and is being submitted for the degree of Master of Science in Nursing. This report has not been submitted for any other degree at any other institution.

Signature ……Kerry-Ann Singaram……

25th ……..day of……January……20 21…in…Winchester Hills……

DEDICATION

In dedication to all future midwives:

“Don’t be afraid. Be focused. Be determined. Be empowered.”

Michelle Obama

ABSTRACT

Neophyte midwifery students often feel anxious and inadequate during their clinical placements, as they are expected to perform midwifery skills as early as their first day in the clinical environment. Midwifery educators are seeking out creative ways to create practice opportunities for their students with regards to skills practice, and simulation as a teaching strategy offers a learning environment for safe practice of skills. The use of simulation in midwifery is a fairly new concept, and its future growth is dependent upon research to provide a sound base from which it may grow and develop to meet the needs of the students.

The purpose of the study was to identify key midwifery skills that could be taught and practiced using simulation prior to student midwives' clinical placements that would better equip student midwives to manage their midwifery clinical placements. Findings from the study could serve as a foundational basis for future midwifery simulated programs.

The research design and method was qualitative in nature and data was collected from focus group discussions with fourth-year student nurses and their respective midwifery lecturers.

Clinical facilitators who are based in the clinical environment and responsible for the training of third year midwifery students were invited to participate in the study, however, were unable to attend. The researcher felt that, this created a limitation to the study as they might have added additional information or a different perspective about novice midwifery skills training.

Findings identified specific midwifery skills that could benefit from simulated practice as well as how best skills could be practiced within facilitation of simulation in third year midwifery practice. Summary of findings included the identification of the following midwifery skills that participants identified as being important with regards to simulated practice: completion of documentation; vaginal examinations; management of second stage of labour and offering of psychological support.

Participants together with the researcher gives suggestions on how best simulation can be facilitated for developing confidence in neophyte student midwives before their first clinical placement.

Based on the findings of the this research, recommendations were made to guide midwifery lecturers when planning simulation activities.

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CHAPTER ONE

OVERVIEW OF THE STUDY

1.0 INTRODUCTION

Chapter One gives an overview to this study. The background to the study, problem statement, research question, purpose of the study, research objectives, significance of the study as well as the research design and methods are outlined.

BACKGROUND TO THE STUDY

Currently in South Africa there are two avenues to qualify as a midwife, namely a four-year bachelor degree in nursing offered at universities around South Africa. Upon completing the bachelor degree the newly qualified nurse will be registered with SANC as a professional nurse and midwife. The second avenue available to post graduate students who have completed a three year nursing diploma, is the completion of an advanced diploma in midwifery, where registration with SANC will be a nurse midwife (The government gazette of South Africa, 2019).

Therefore, the training of midwives on an undergraduate level takes place over a two-year period. Students receive both theoretical and practical components of midwifery in these two years, with the aim of "promoting, maintaining, restoring and supporting the health status of a woman and her child during pregnancy, labour and puerperium" (Department of Health, 2013). Healthcare facilities and hospitals accredited by the South African Nursing Council (SANC) are used for practical training of undergraduate students to ensure training provides learning opportunities that can help meet student's learning objectives (Muthathi et al., 2017).

Nurse's and Midwives account for nearly 50% of the global health workforce (World Health Organistion , 2020). However, South Africa is facing a nursing crisis marked by staff shortages, decline in the caring attitude of nurses as well as a discrepancy between the needs of nurses and the needs of the communities being served (Rispel, 2015). The need for strengthening of the undergraduate midwifery students training was highlighted, when South Africa failed to achieve the Millennium Development

Goals 4 and 5, set out by the United Nations in 2000, which should have been accomplished by 2015. Goals 4 and 5 were concerned with reducing child mortality rates as well as improving maternal health respectively (Bryce et al., 2013). It is therefore imperative that the midwifery component of the undergraduate nursing curriculum addresses the needs of the community and provides for practice ready nurses, who are able to perform the required essential midwifery clinical skills efficiently and safely, on completion of their four-year undergraduate training (Marzouk, 2015).

An article written by Bryce et al. (2013) highlighted challenges experienced by student midwives. According to Bryce et al. (2013) student midwives appeared to focus more on the theoretical aspect of a presenting problem rather than the patient's clinical presentation or physical assessment, which at times leads to a misdiagnosis and ultimately leads to poor patient outcomes.

Furthermore, a study conducted at an institution of higher education in Gauteng, explored undergraduate student nurse's obstacles to best practice in clinical settings. Students expressed the notion that limited time in the clinical placement areas, and theory being taught at a time did not necessarily match the clinical setting in which they were placed. Students felt that skills practiced in a simulated environment should correlate to where they are being placed, in order to apply taught and practiced skills efficiently (Muthathi et al., 2017).

Clinical skills form the basis for midwives' professional practice, and therefore students need ample opportunities to learn, develop, and master skills related to the theory in order to deem themselves competent future midwives (Malwela et al., 2016).

Midwifery educators rely on clinical teaching and practical guidance during clinical placement for the teaching of midwifery skills. This is done by midwives and clinical facilitators during clinical placements, as this is where students experience the unfolding of real-life scenarios. A shortage of clinical facilitators and mentors, combined with an increased number of student midwives needing to be placed in an ever decreasing number of suitable clinical sites pose challenges for midwifery

lecturers when optimizing clinical learning opportunities for their students (Stefaniak & Dmoch-Gajzlerska, 2020).

It is therefore important for nurse educators to create and review learning opportunities to prepare midwifery students for complex real-life situations, despite these challenges. Sittner et al. (2013) says “Maternal–child educators are seeking creative solutions to bridge didactic instruction to the clinical setting” as students are finding it difficult to provide hands-on obstetric care due to limited opportunities to practice midwifery skills.

One of the creative solutions that (Sittner et al., 2013) refers to is simulation which is a teaching strategy that presents clinical events in an almost real-life scenario, whereby nurses can practice skills in a safe environment (Lavoie & Sean, 2017). Simulation as a teaching strategy aims to improve aspects of clinical training such as, clinical skills transference of theory into practice, critical thinking and student satisfaction. However, more research needs to be done to ascertain whether skills learnt or practiced in a simulation environment can better prepare student midwives for their clinical placements (Marzouk, 2015).

1.1 PROBLEM STATEMENT

There is a need currently in South Africa to ensure that undergraduate student nurses are practice ready on graduation. Student nurses face many clinical constraints within their placements, often due to a lack of clinical teaching support as well as lack of resources within their clinical placements to enable them to practice their clinical skills (Botma et al., 2010). Simulation has grown exponentially during the last 10 years in response to the challenge of attaining clinical skills competency amongst student nurses. Research evidence indicates that skills training in a simulated environment helps students feel better prepared for their clinical placement, which is important for midwifery students as many of the skills required in midwifery, are new skills that require more practice opportunities.

There is evidence of simulation in the midwifery curricula (Bryce et al., 2013) but there remains a lack of a systematic evidence based approach to the preparation of neophyte student midwives within their midwifery clinical placements and how

simulated practice could improve their preparedness for exposure to the clinical setting for the first time.

1.2 RESEARCH QUESTION

What specific midwifery clinical skills taught through simulated practice prior to clinical placement could better equip third-year nursing students, as an adjunct to their clinical task training?

1.3 PURPOSE OF THE STUDY

To highlight specific midwifery clinical skills that need more practice for developing confidence in neophyte student midwives before their first clinical placement, by the use of simulation.

1.4 STUDY OBJECTIVE

- To identify specific midwifery skills that would better equip the third-year nursing students to manage their midwifery clinical placements and serve as a guide to midwifery lecturers when planning simulation activities for their students.

1.5 SIGNIFICANCE OF THE STUDY

The findings of the study will add knowledge to the nursing profession with regards to understanding the perspective of senior student midwives (fourth-year student nurses) and their respective midwifery lecturer's specifications on specific midwifery skills that could benefit from simulated practice. The researcher chose the senior midwifery students (fourth-year nurses), to draw from their experiences during their time as neophyte midwifery students and the midwifery lecturers were chosen based on their expert knowledge surrounding midwifery. The findings of this study will help inform future teaching methodologies and curricula in midwifery.

1.6 DEFINITION OF KEY CONCEPTS

- **Midwife** is a recognised and accountable professional who works in partnership with women to give necessary support, care and advice during pregnancy, labour and the postpartum period. He/she can conduct births which they should take full accountability for and to thereafter provide care to the infant. This care includes preventative measures, the promotion of normal birth, the detection of complications in mother and child, the accessing of medical care or other appropriate assistance and the carrying out of emergency measures (International Confederation of Midwives, n.d.).

- **Midwifery** refers to a caring profession practised by persons registered under the Nursing Act no.33 of 2005, which supports and assists the health care user and in particular the mother and baby, to achieve and maintain optimum health during pregnancy, all stages of labour and the puerperium (Department of Health, 2013).

- **Undergraduate Nurses** are students enrolled in the four year undergraduate nursing program in order to obtain the bachelorette degree in nursing (Muthathi et al., 2017).

- **Simulation** is a form of imitation of a real-life scenario that is used in health science education to help students to learn how to cope with real-life situations (Hughes & Quinn, 2013).

- **Simulation program** is an organizational simulation plan including the required resources needed, with the aim of improving patient safety by highlighting and honing in on practical skills that will benefit from simulated practice. A variety of simulation techniques included in the program, ranging from high to low fidelity simulation. (Palaganas et al., 2015).

- **Clinical facilitator** is a hospital employee of an academic hospital who is required to facilitate clinical learning to undergraduate students in their clinical ward placements, clinical facilitator need to be well versed in the area in which she is deployed to facilitate clinical learning (Bruce & Klopper, 2017).

- **Midwifery lecturer** a professional nurse registered by SANC as a nurse educator, employed by an institute of higher education, that teaches students the subject of midwifery, the area of his/ hers expertise (South African Nursing Council, n.d.).

- **Competency** ability to take action by combining knowledge, skills, values, beliefs, and experience acquired as a nurse (Fukada, 2018).

- **Skill** type of work or activity which requires special training and knowledge (Solvik & Struksnes, 2018).

- **Neonatal Mortality Rate** the number of neonatal deaths per 1000 live births (World Health Organization, 2006).

- **Maternal Mortality Rate** the number of registered maternal deaths due to birth or pregnancy related complications per 100,000 registered live births (World Health Organization, 2019)

1.7 OPERATIONAL DEFINITIONS

- **Third-year nursing students** according to this study, third-year nursing students refer to individuals who are in their penultimate year of study for the attainment of the Degree in Nursing and in their first year of midwifery training.

- **Fourth-year nursing students** according to this study, fourth-year nursing students refer to individuals who are in their final year of study for the attainment of the Degree in Nursing and in their second year of midwifery training.

- **Simulation** in this study refers to all types of simulation such as use of task trainers, use of simulated patients and high-fidelity human patient simulators.

1.8 CONCLUSION

In this Chapter, the background of this study, the problem statement, research question, purpose and objectives were explained. Definition of key concepts were provided and the research design and method were briefly covered and will be explained in detail in Chapter 3.

The following chapters are to follow:

Chapter Two provides the literature review.

Chapter Three discusses the research methodology

Chapter Four covers the presentation of the findings

Chapter Five gives discussion of the findings, the conclusion and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.0 INTRODUCTION

This chapter presents the literature review surrounding midwifery, midwifery training and the use of simulation in nursing education, with regards to skills practice. Subjects covered in this review are: Challenges faced by midwives; quality of midwifery education in South Africa; moving away from didactic learning by incorporating simulation; how simulation is being used in undergraduate training and specifically in midwifery training abroad.

2.1 MIDWIFERY

“Midwifery encompasses care of women during pregnancy, labour, and the postpartum period, as well as care of the newborn. It includes measures aimed at preventing health problems in pregnancy, the detection of abnormal conditions, the procurement of medical assistance when necessary, and the execution of emergency measures in the absence of medical help” (World Health Organisation, 2017).

Midwifery is the profession that is practiced by midwives, and is a culmination of a unique body of knowledge, skill set and professional attitudes drawn from principles of science and sociology, to cater for the well-being of women and infants (International Confederation of Midwives, 2017).

According to the Society of Midwives of South Africa, n.d (SOMSA) midwives are the front-line caregivers and back bone in maternal and child healthcare, as midwives care and support women throughout their journey toward motherhood from ante-natal to post-partum care. SOMSA further states that this position places midwives under immense pressure to meet the challenges of rendering good quality care to women and infants.

2.1.1 CHALLENGES FACED BY MIDWIVES

2.1.1.1 SHORTAGE OF QUALIFIED MIDWIVES

The State of the World's Midwifery (SoWMy) 2014 report stated that there is a dire shortage of adequately trained midwives to support the health of mothers and their infants, the report further attributed the rise in maternal and infant mortality to this shortage. Sarfraz (2014) supports this report by contextualizing the shortage in developing countries, which the study illustrates to be the most severely affected by the midwifery shortage.

According to the Chief Executive Officer (CEO) of the Nursing Education Association, Nelouise Geyer, there is a dire shortage of specialist nurses in South Africa, particularly midwives (Geyer, 2016). Due to this extreme shortage of professional nurses and midwives, they are often put in situations where their scope of practice greatly exceeds their formal educational training (New Partnership for Africa's Development, 2013).

A study done at a University in Limpopo, South Africa (2015) illustrates the challenges experienced by midwives in the Limpopo Province. Midwives were asked to partake in semi-structured interviews with the central question exploring challenges that they faced within their working environments. Prominent themes that came up were: shortage of midwifery practitioners; insufficient material resources; sub-optimal midwifery interventions that lead to medico-legal hazards (Thopola & Lekhuleni, 2015).

One of the recommendations of the above mentioned study was to improve the quality of student midwives education to produce new midwifery graduates with the skill set to manage obstetric/gynecological care competently, amidst the challenges surrounding the midwifery profession (Thopola & Lekhuleni, 2015).

2.1.1.2 MATERNAL AND NEONATAL MORTALITY RATE

The World Health Organization (WHO) has made maternal and neonatal health a priority for many years, due to the alarming increase globally in maternal and neonatal mortality rates. Maternal and neonatal mortality statistics over the years have not improved on a targeted level, regardless of measures driven by WHO (Bremnes et al., 2018).

WHO's aim was to reduce infant and neonatal mortality by two thirds, between 1990 and 2015 and reduce maternal deaths by three quarters during the same period (Darmstadt et al., 2013). Estimates developed by the United Nations Inter-agency Group for Child and Maternal Mortality Estimation (2018), illustrate that globally there is a significant decline of mortality among the developed countries, whereas developing countries in particular sub-Saharan Africa are falling short, with their neonatal and maternal mortality rates continuing to be amongst the highest.

In the sub-Saharan African (SSA) region currently, approximately one million infant deaths occur in the first month of life, making SSA the bearer of the highest neonatal mortality rate globally (Desalew et al., 2020). Desalew et al. (2020) attributes many neonatal deaths in SSA to; infectious diseases, intrapartum asphyxia, pregnancy related complications and premature births. The study emphasises that these conditions could be prevented or treated by the delivery of quality ante-natal care through early detection of maternal complications and thereafter appropriate referral.

Along with a high occurrence of neonatal deaths, the maternal death rate in sub-Saharan Africa faces an alarming situation regarding high maternal mortality rates, where one in every 160 women die due to pregnancy related conditions as compared with one in every 3700 women in developed countries (Girum & Wasie, 2017).

Maternal and neonatal mortality is a result of complications during pregnancy and after childbirth, most of these complications especially during pregnancy are preventable if treated early (WHO, 2018). In most cases, maternal mortality is directly linked to neonatal mortality as there are numerous ways that a maternal death may affect health outcomes of neonates. The direct causes of maternal death are the following obstetric

complications; eclampsia, sepsis, obstructed labour and haemorrhage (Moucheraud et al., 2015).

Persistent high levels of mortality in both mothers and neonates calls for more research to improve care of pregnant women, to help mitigate the situation at hand (Bremnes et al., 2018).

Childbirth is a significant life changing event in a woman's life, however sometimes the outcome does not meet the woman's expectations or the midwives' intentions. If complications do arise, this may put the women and her child at risk to poor health outcomes such as maternal death, neonatal deaths or developmental harm of an infant. These poor outcomes have devastating effects on families and may lead to the risk of litigation being present at every birth attended by the midwife (Alexander, 2018).

2.1.1.3 THE IMPACT OF LITIGATION ON MIDWIFERY

No healthcare professional is immune to making clinical mistakes; however, midwives are highly vulnerable to do so given the high stress environments they work in (Mashigo, 2016). Factors such as staff shortages, long working shifts and lack of specialized doctors at the bed side, increase the chance of clinical mistakes occurring with the potential of a lawsuit to follow. The impact of increased litigation involving midwives acts as a deterrent for midwives to stay in the profession or for new graduates to enter into it, further exasperating the shortage of midwives (Peyman et al., 2019). Peyman et al.(2019) suggests an improvement in the clinical training of midwives must be addressed, to improve maternal and neonatal outcomes and thus mitigate the rise of litigation in midwifery.

2.2 QUALITY OF MIDWIFERY TRAINING IN SOUTH AFRICA

Currently in South Africa there are two avenues to qualify as a midwife, namely a four-year bachelor degree in nursing offered at universities around South Africa. Upon completing the bachelor degree the newly qualified nurse will be registered with SANC as a professional nurse and midwife. The second avenue available to post graduate students who have completed a three year nursing diploma, is the completion of an

advanced diploma in midwifery, where registration with SANC will be a nurse midwife specialist (The government gazette of South Africa, 2019).
Midwifery training of students has both theoretical and practical (skills) components, the areas covered by theory are: scope of practice and relevant legislation pertaining to midwifery, low and high-risk pregnancy, labour, puerperium, and care of a neonate. The practical aspects are covered in the specific SANC accredited training health facilities (Malwela et al., 2016).

The South African Department of Health has expressed concern over the quality of training of midwives in South Africa and acknowledged a need to improve the training of midwives. The need for improvement of midwifery training led the health department to embark on a massive drive of in-service training in midwifery skills to the current workforce in order to better equip them with the skill set to render their services safely and competently (Schoon & Motlolometsi, 2012).

Newly qualified midwives are expected to be job/practice ready when entering their clinical placements, by displaying competence in their rendering of care as well as being accountable and responsible for their decisions and actions. However, a study done by Netshisaulu & Maputle (2018) in the Limpopo province showed that newly qualified midwives lacked independence in their decision making ability and the tasks allocated to them were not done independently, which in turn increased the workload of the experienced midwives in the clinical environment.

A recommendation from Netshiasaulu & Maputle (2018), was to strengthen midwifery training with the aim of better equipping newly qualified nurses to be practice ready after completion of training.

2.3 IMPORTANCE OF STRENGTHENING MIDWIFERY TRAINING IN SOUTH AFRICA

As previously mentioned, nurses and midwives constitute the majority of the global health workforce and the largest health care expenditure, it is vital for nurse education to ensure the graduation of a competent workforce within existing health systems in order to render quality care (Bvumbwe & Mtshali, 2018). As Ahmadi et al. (2018) stated; the acquisition of midwifery skills is the foundation to a midwife's professional practice, and therefore future midwives should have opportunities to develop and master these skills safely (Ahmadi et al., 2018).

The South African Department of Health formulated a nursing strategic plan in 2012 (The National Strategic Plan for Nurse Education, Training and Practice 2012/13-2016/17), in which they identified various challenges facing the nursing profession, with nursing education being a priority. Part of the government's strategic plan was to reform nursing education, by moving the nursing qualifications to higher education, with the aim of improving the professionalism of nursing (Blaauw et al., 2014).

The continuous change in healthcare and health care demands, is forcing nurse educators to move away from didactic teaching and seek more innovative approaches to improving their student's outcomes, with the purpose of preparing them for a highly complex and dynamic working environments (Sharma, 2017).

Midwifery clinical skills that need to be acquired competently can be invasive, as one may be required to do a vaginal examination to monitor progression of labour. These skills need to be mastered prior to practicing on real patients to ensure the safety of the patients and to avoid poor patient outcomes (Shea & Rovera, 2015). One of the innovative approaches to learning that has been identified is simulation.

2.4 SIMULATION

Simulation is described as a technique for practice and learning were situations can be created and objects used to replace and amplify real experiences with guided experiences (Lateef, 2010). The nature of simulation forces students to engage in active learning, and in this process encourages critical thinking and problem solving on a deeper level which are two concepts that are needed to ensure safety in clinical environments and optimum patient care (Quinn et al., 2013). The degree of reality that a simulation scenario displays is known as fidelity, with high fidelity being the closet to real-life. Various modalities used in simulation are part of the factors that enhance the fidelity of the scenario, these modalities include: task trainers, simulated patients as well as the more technologically advanced high-fidelity human patient simulators (Palaganas et al., 2015).

Table 2.4.1 Various modalities used in simulation (Alden & Durham,2008)

Types of simulation	Definition Type text here
Task trainers	Task trainers are meant to represent one part of the body, and are used to train basic psychomotor skills and procedures
Simulated patients	Simulated patients are used within simulation scenarios to increase the fidelity of the learning experience, and to assist with practice of effective communication skills.
High-fidelity human patient simulators	High-fidelity human patient simulators are among the most recent technologic advances in instructional methodologies for medical and nursing education. These interactive mannequins are capable of realistic physiologic responses, including respiration, pulses, heart sounds, breath sounds, urinary output, and pupil reaction.

Using clinical simulation as a learning and teaching technique in nursing education has been gaining more momentum recently. The study entitled: “Learning in simulation: Ready? Steady? Go!” by Crafford et al.(2019) is an indication of some of the recent work being carried out in this arena. According to the study, learning through simulation is fast becoming an important teaching and learning strategy in nursing education.

2.5 HOW SIMULATION IS BEING USED IN UNDERGRADUATE MIDWIFERY TRAINING INTERNATIONALLY

Professional nursing bodies, National League for Nursing (NLN) and Nursing and Midwifery Council (NMC) have endorsed simulation as a teaching method internationally, which has led certain countries to invest in simulation for the purposes of teaching and learning in nursing and medical programs (Hamilton, 2009).

The Nursing Council of New Zealand (NCNZ) has made simulation mandatory in their undergraduate nursing programs, with the aim of better preparing and ensuring safe practice of students entering their clinical placements, this is evidenced by a collaborative simulation project that was formulated by Edgecombe et al.(2013) and funded by the New Zealand’s Ako Aotearoa Project. The simulation project formulated a guide to clinical simulation in nursing, with the intent to assist nurse educators to facilitate simulation in their student training (Edgecombe et al., 2013).

The United States of America is another country that recognizes the value in simulation; The National Council of State Boards of Nursing (NCSBN) supports substitution of high-quality simulation with a percentage of clinical hours in undergraduate nursing programs (Nye et al., 2018).

Midwifery within the simulation world has a range of modalities at the educator’s disposal, ranging from simple task trainer’s and simulated patients to high fidelity human patient simulators that can simulate vaginal births. One of the advantages of simulation lies in its ability to adapt to different resourced settings, Shea et al.(2015) acknowledged that not many educational institutes have the resources to adopt high fidelity scenarios and looked at something as simple as an orange to simulate cervical

dilatation and effacement. This was done by cutting appropriate sized holes into the citrus fruit and then allowing the students and their respective educators to get the tactile experience of doing a vaginal examination, educators acknowledged that this was not anatomically accurate but the tactile feel was close to the real thing.

The Nursing College at the University of New Mexico, in the United States held a simulation day for their undergraduate midwifery students, using simulated patients to portray birthing women. Simulated patients were used for the day, to simulate vaginal births whilst standing and students were expected to attend to these births whilst being watched by their respective educators. Educators found this beneficial to students, as they worked in teams and therefore their role development and communication skills were enhanced as they encountered human interaction (Ruyak et al., 2018).

A nursing department at a university in England engaged in a pilot study, to evaluate the use of a birthing high fidelity simulator which they used in their midwifery program. Midwifery students who trained and used the simulator expressed a positive perspective on the use of the birthing simulator in curbing the student midwives nerves during a delivery and the simulator was a good starting point to their clinical midwifery placements (Davies et al., 2009).

International nursing programs and bodies have welcomed simulation as a teaching method in their programs; however simulation in South Africa is still an emerging pedagogy due to the lack of formal simulation programs to guide nurse educators in their training of undergraduate students (Thurling, 2017).

2.6 CONCLUSION

In this chapter, literature surrounding midwifery, midwifery training and use of simulation in nursing education, with regards to midwifery skills practice has been explored. The next chapter will discuss the research methodology used in this study.

CHAPTER THREE

RESEARCH DESIGN AND RESEARCH METHOD

3.0 INTRODUCTION

In this chapter, the research design, setting, population, sampling and method used for data collection and data analysis are discussed, as well as the measures to ensure ethical compliance and the trustworthiness of the study.

3.1 RESEARCH DESIGN

Research design can be considered as the structure of research, it is the “glue” that holds all the elements in a research project together (Akthar, 2014). According to Kumar (2011), the research design is the overall plan and strategy for conducting a research with the purpose of addressing the research question and ultimately fulfilling the purpose of the research.

The research question being addressed in this study was: **“What specific midwifery clinical skills taught through simulated practice prior to clinical placement could better equip undergraduate third year nursing students, as an adjunct to their clinical task training?”**

The purpose of the study was to identify specific midwifery skills that would better equip the neophyte midwives to manage their midwifery clinical placements, with the aim of identifying skills to form a foundational bases for a possible future simulated program. The researcher chose a qualitative, exploratory-descriptive research design to address the purpose and objectives of the study.

3.1.1 QUALITATIVE RESEARCH

Qualitative research is an interpretive methodological approach that values subjective science and is a method to understand the nature of human beings (Grove and Gray, 2019). The researcher wanted to investigate the experiences of the senior midwifery students (fourth year nursing students), with regards to undergraduate midwifery training to allow for an informed and more subjective view.

The principle characteristic of qualitative research is that it explores and examines how people view the world out of their own real-life experiences, in their own minds and language. The researcher gains insight into these experiences and draws out how they have transpired in a structured way (Cropley, 2015).

Qualitative research is inductive, whereby information grows from a starting point due to the researcher's ability to gather concepts and make connections from data collected from participants (Taylor et al., 2015). For this research project, data was collected and analyzed by the researcher from focus group discussions (FGD's) that included fourth-year nursing students and a separate focus group consisting of their midwifery lecturers to produce themes and links.

Qualitative studies serve to gain insight and make sense of certain experiences within an environment that is familiar to participants (Mohajan, 2018). In this study, participants were interviewed in the nursing education institution that they are enrolled at, in the case of the fourth-year nursing students, or employed as a midwifery lecturer, creating a comfortable natural setting. FGD facilitators were not lecturers in the department where the participants were enrolled or employed at, or involved in any way in student's academic progress, this allowed for freedom of expression from participants.

Qualitative research aims to produce rich and in-depth data, and this is achieved by posing open ended questions to participants to allow for free expression of their views (Nyumba et al, 2017). The researcher chose a semi-structured interview in the form of a FGD to achieve this.

3.1.2 EXPLORATORY DESCRIPTIVE QUALITATIVE RESEARCH

"Exploratory-descriptive qualitative research is conducted to address an issue or problem in need of a solution and/or understanding" (Grove and Gray, 2019). Focus group discussions with voluntary participants were used for data collection in order to attain a better understanding of student nurses experiences when learning midwifery skills, and their views on how simulation could be used in their attainment of these skills.

3.1.3 EXPLORATORY QUALITATIVE RESEARCH

Exploratory research begins with a sparked interest within the researcher, and this spark fuels the researcher to investigate the full nature of the area of interest from the manner in which it is manifested, and the other factors to which it is related including potential factors that might be causing it (Polit and Beck, 2010). The researcher chose to research the area of simulation, and furthermore wanted to explore whether fourth-year nursing students thought that simulation practice of specific midwifery skills could possibly benefit the third-year nursing students within their midwifery clinical placements.

3.1.4 DESCRIPTIVE QUALITATIVE RESEARCH

Descriptive research is done to produce more information in a particular field, it may be used to identify problems with current practice; to justify current practice or determine what other professionals in similar situations are doing (Brink et al., 2012). The researcher wanted to investigate the practice of simulation, and whether it could benefit the third-year midwifery students for their clinical midwifery placements.

Descriptive Qualitative designs rely heavily on observation for the collection of data, data collected can be done in the form of interviews and must be written down or recorded for the purpose of analysis (Walliman, 2011). The researcher chose to conduct FGD's as a means of collecting data, all FGD's were digitally recorded with participant consent and subsequently transcribed word for word.

3.2 RESEARCH METHODS

Research methods include all the techniques and methods the researcher undertook while conducting the research, from data gathering and analysis to ensuring the trustworthiness and ethical considerations of the study (Botma et al., 2010). Research methods are also referred to as "the tools of the trade" that help collect, build and analyse information (Walliman, 2011). The study was conducted in two phases, phase 1 and 2 were undertaken concurrently.

3.2.1 SELECTION OF THE SITE

A site in qualitative research is defined as the general environment in which the research takes place, it could vary from an entire community or to an institution within a community (Polit and Beck, 2010). The selection of the site should provide access to the study's potential participants who have knowledge on the topic being studied to give the researcher relevant information (Polit and Beck, 2010). The study participants chosen for the study were the fourth-year nursing students and their respective midwifery lecturer's and clinical facilitators, the site chosen for this study was the Nursing Education Department registered as a Higher Education Institute in the Gauteng province, to which the study participants were registered as undergraduate students or employed as midwifery lecturers or clinical facilitators.

3.2.2 POPULATION

Population is defined as all individuals who are of a particular type or possess an individual element and who also serve as the focus of the research (Burns and Grove., 2012). To explore or explain real-world contexts, it is important to look for variety in people to obtain a mix of perspectives (Kortjiens et al., 2017). The population chosen for this study were the senior midwifery students - fourth-year nursing students and their respective midwifery lecturer's and clinical facilitator's.

3.2.2.1 Description of the Total Population

Phase 1

- The population of interest for this phase of the study were the fourth-year nursing students who were enrolled in the Department of Nursing where the study was conducted, (N=35).

Phase 2

- Midwifery lecturers and clinical facilitators responsible for the training of third year midwifery undergraduate students, (N=5).
- Midwifery lecturers (N=3)
- Clinical Facilitators (N=2)

3.2.3 SAMPLING

Non-probability convenience sampling was used in this study. This type of sampling involves the choice of readily available participants for the study and is often used in Qualitative research (Brink et al., 2012). Potential study participants, belonged to the same university the researcher was enrolled at for her post-graduate qualification, this made accessibility to them convenient.

3.2.3.1 Sampling Method

Total population sampling was used in both Phase 1 and Phase 2. It is a sampling method where the whole population of interest is studied. It is practical when the total population is of a manageable size, such as a well-defined subgroup of a larger population (Etikan et al., 2016).

Phase 1

- All fourth-year nursing students were invited to participate in the study (N=35), 26 participants (n=26) signed voluntary consent to participate in the study.

Phase 2

- All midwifery lecturer's and clinical facilitators responsible for the training of third-year nursing students (N=5), 3 participants (n=3) signed voluntary consent to participate in the study.

3.2.3.2 Sampling Size

Phase 1

- 26 fourth year nursing students (n=26)

Phase 2

- midwifery lecturer's (n=3)
- Clinical Facilitator's (n=0)

3.2.3.3 Inclusion and Exclusion Criteria

Phase 1

Inclusion criteria

- Fourth-year nursing students who were in their final year of study and have been exposed to midwifery training for over 1 year.

Exclusion criteria

- Participants who were not willing to sign consent for participation and digital recording of the FGD's.
- Third-year undergraduate students

Phase 2

Inclusion criteria

- Midwifery lecturer's and clinical facilitators involved with and responsible for the training of the third-year undergraduate nursing students.

Exclusion criteria

- Participants who were not willing to sign consent for participation and digital recording of the FGD's.
- Lecturer's that are not involved with midwifery training

3.3 DATA COLLECTION

Data collection refers to the way the researcher gathered the information that he\she used (Maxwell, 2012). The researcher for this study chose semi-structured focus group discussions (FGD's) as a data collection method. Focus group discussions are an exchange of views with groups of about 5-10 people. The interviewer takes on a facilitative role by starting and guiding the discussion (Polit and Beck, 2010). Focus group discussions serve as a means for generating information on common or opposing opinions, and highlights meanings that lie behind those views to gain a rich understanding of participants experiences (Gill et al., 2008).

3.3.1 DATA COLLECTION METHOD

Phase 1 and 2 were conducted in an identical manner for the following: Data collection Method, Data collection tool and Data collection process.

Semi-structured FGD's with fourth-year nursing students (Phase 1) and their respective midwifery lecturer's (Phase 2). The discussion was deemed semi-structured as it was guided by an interview guide, containing an open-ended central question followed by probing questions (Annexure 1). This approach allows for flexibility of the interview as it allows for the discovery or elaboration of information that is important to participants and may not have previously been thought of as important by the researcher (Gill et al., 2008).

3.3.2 DATA COLLECTION TOOL

3.3.2.1 The Researcher

The main data collection tool in qualitative study is the researcher, as she formulates meanings through her engagement in the study (Botma et al., 2010).

The researcher carefully prepared an interview guide (Annexure 1) for the FGD's that was assessed prior to commencement of the FGD's by her supervisor and the University's assessor committee. To ensure effective facilitation of the discussions, the researcher revised and became familiar with the guide before conducting the FGD's. Effective facilitation was shown by the researcher listening intently to what was said by the participants, and thereafter asking appropriate probing questions to allow for elaboration of certain opinions.

The researcher's supervisor took on the role of co-facilitator and wrote down key aspects of the discussions as well as intervened when necessary, for clarification purposes.

3.3.2.2 Process followed to facilitate the group discussion

The researcher used an interview guide (Annexure 1) to ensure objectives of the discussion were covered, it also serves as a written guide to keep focus of the discussions during commencement (Polit and Beck, 2010). The researcher used the same interview guide for all FGD's conducted, to ensure consistency throughout the process. The total estimated time for the FGD's was 60 minutes, with the participant

discussion taking the bulk of the time allocated. The activities defined by the guide were as follows:

- Welcome and Introduction
- Signing of relative consent forms
- Clarification of ground rules
- Definition of terms (Midwifery clinical skills, Simulation, Simulation program)
- Starting of questions and discussion
- Conclusion

3.3.3 DATA COLLECTION PROCESS

3.3.3.1 Prior to FGD commencement

- The researcher obtained Assessor's and HREC approval prior to starting the data collection process (Annexure 2&3).

- For the researcher to gain access to the students and lecturer's, permission was sought after and granted by the head of the nursing department as well as their class co-ordinators (Annexure 4).

- Lecturer's and clinical facilitators were contacted via electronic email to explain the nature of the study and invite them to participate.

- The researcher approached the students in their classes with the consent of their course co-ordinator to explain the nature of the study and invite them to participate.

- The information letter (Annexure 5) was sent to all potential participants via electronic messenger prior to the FGD's.

- Electronic messenger was used by the researcher as a means of agreeing on a venue and time that was convenient to all potential participants.

- FGD's were done on different days and at different times, for the participants to participate in the FGD's at a time convenient to them.

- The venue chosen was the Simulation Laboratory at the University of the Witwatersrand Medical School, an area the potential participants were familiar with as it is used by the Nursing Department frequently for clinical training.

- Clinical facilitator's who were invited to participate in the study were unable to attend the FGD's with the midwifery lecturers.

3.3.3.2 FGD commencement:

- On arrival participants were greeted by the researcher and co-facilitator and asked to read through the information letter (Annexure 5) once more before signing the consent forms to participate and for permission to digitally record the FGD's (Annexure 6).

- Participants sat in a circle seating arrangement that was prepared for by the researcher prior to the participants arrival. This arrangement allowed for easy visualization of all participants by each other and for the researcher and co-facilitator and created an atmosphere of equality.

- Refreshments were available to all participants.

- The researcher placed two voice recorders on play at the center of the table, after having received consent forms from all participants. This was done to ensure optimum quality of voice recordings.
- The researcher then commenced the discussion according to the interview guide (Annexure 1).

- The central question posed by the researcher, acted as the catapult for the commencement of the discussion, followed by appropriate probing questions posed by both the researcher and co-facilitator

  Which third year midwifery clinical skills do you feel, would benefit from simulated practice, prior to the third years being placed in their specific clinical placements?

- All focus groups were conducted smoothly with no distractions

    - The first and second focus group were held on the 17th November 2019, with 8 and 6 student nurses, respectively. The first focus group lasted 63 minutes and 48 seconds, and the second focus group lasted 66 minutes and 5 seconds.
    - The third focus group was held on the 18th of November 2019, with 6 student nurses. Duration of this discussion lasted 1 hour and 6 minutes
    - The fourth focus group was held on the 19th of November 2019, with 6 student nurses. Duration of this discussion was 66 minutes and 22 seconds
    - The fifth FGD was held on the 10th of December 2019 with 3 midwifery lecturer participants. Duration of this discussion was 58 minutes and 49 seconds.
    - Total population sampling was used in both Phase 1 and Phase 2, the researcher interviewed who was available at the time of data collection

3.4 DATA ANALYSIS

Data Analysis refers to the interpretation of themes or patterns that emerge from data collected by the researcher (Creswell & Creswell, 2018).
Data analysis was done at the same time for both phases using Creswell's steps of Data Analysis.

3.4.1 ORGANISING AND PREPARATION OF DATA

All FGD's were transcribed word for word (Annexure 7). FGD's were recorded on two electronic devices to allow for sound audibility when transcription was done. Field notes were read whilst listening to recordings to ensure consistency of data. After each FGD, the researcher listened to the voice recordings and made summaries based on the ideas that arose from each FGD.

3.4.2 ESTABLISHING A GENERAL SENSE

The researcher read the transcriptions and listened to data repetitively, to reflect on the overall meaning of what transpired during the FGD's. Whilst reflecting, side notes were written in the margins of the printed completed transcriptions.

3.4.3 CODING OF DATA

The researcher reviewed the research question. The participant's perceptions which identified certain midwifery skills that could benefit from simulated practice, prior to clinical placements were recognised and highlighted across all five FGD's. Text segments were formed from the researcher highlighting perceptions that frequently arose. Codes were formed by the researcher finding the most appropriate phrase for identified text segments. The researcher examined all codes thoroughly, and thereafter chose the most descriptive wording to give a topic to these codes, thus creating themes. Each theme that was formulated by the researcher umbrellaed its own set of sub-themes. Multiple perceptions from different participants arose from each FGD, and this was illustrated by the researcher justifying the themes and subthemes with direct quotes from participant's responses.

3.4.4 DEVELOPMENT AND IDENTIFICATION OF THEMES AND SUB-THEMES

Identification of categories allowed the researcher to produce themes and respective sub-themes from the coded data. Themes were then analysed by the researcher, in order to elaborate on theme inter-connections and patterns found by the researcher.

3.4.5 REPRESENTATION OF FINDINGS

A summary of findings, themes and subthemes were tabulated. A more in-depth description of findings along with direct participant quotes and relevant literature, are further elaborated on in chapter 4.

3.4.6 INTERPRETATION OF DATA

Interpretation of data aims to capture the essence of the entire research project, that was embarked on (Creswell, 2014). The overall meaning and findings are explained in detail in Chapter 5.

3.5 TRUSTWORTHINESS

Trustworthiness refers to the efforts made by the researcher to ensure that her practices throughout the study were transparent, authentic and auditable (Gunawan, 2015). According to Lincoln and Guba (1985) as cited in Polit and Beck (2010), they suggest four criteria for ensuring trustworthiness in a qualitative research study: credibility, dependability, conformability and transferability.

3.5.1 CREDIBILITY

Credibility refers to the level of honesty in which the researcher conducted her work, during all research steps throughout the study (Walliman, 2011). Credibility is achieved when research methods bring about confidence in the truth of the data and in the researcher's interpretation of the data (Polit and Beck, 2010).
The following measures were taken by the researcher to ensure credibility:

3.5.1.1 Member Checking

Member checking refers to ongoing consultations with the participants throughout the data analysis process, to verify the researcher's interpretations of data and meanings, thus ensuring the truth value of data (Creswell, 2014).

- Informal member checks were done during the FGD's, the researcher played a facilitative role where she summarized what was said and asked for clarification on certain ideas

3.5.1.2 Authority of the researcher

The researcher is the major instrument in qualitative research. The experiences, qualifications and prior knowledge the researcher brings to the field are vital indicators of the credibility of the researcher (Patton, 2002).

- The researcher has over ten years of experience in nursing practice, during this time she has worked as a registered nurse in various paediatric specialty wards as well as served as a simulation coordinator for a University in Gauteng.

- The researcher completed a research methodology course and has a full understanding of the research process and various research methodologies.

- The researcher's supervisor and co-supervisor have vast knowledge and experience in simulation and midwifery respectively. Both supervisors are highly qualified in supervising post-graduate students.

3.5.1.3 Frequent debriefing sessions between researcher and supervisor

The supervisor's role is vital in ensuring a research report that is of an acceptable standard, through continuous feedback throughout the entire research project (Griffiths, 2015).

- The researcher consulted with her supervisor on a regular basis to discuss and verify all stages of the study and with her co-supervisor as a content expert.

3.5.1.4 Ensuring honesty in informants

Participant's need to be free to express their opinions without fear of losing credibility in the eyes of the organisation to which they belong to (Shenton, 2004).

- In this study participants were invited to voluntarily participate in the study.

- The researcher explained that participants had the right to withdraw at any time of the study, and if they wished to do so they would suffer no penalties.

- Participants were assured that participating in the study did not affect their academic achievements.

- The researcher and her supervisor, who were also facilitators of the FGD's were not directly linked with the participants theoretical and clinical education, this made participants free to express their ideas without being concerned about any adverse cause or effect.

3.5.1.5 Triangulation

Triangulation refers to using more than one source for collection of data, either from different sites or data from different types of people (Kortjens et al., 2017). FGD's were done with fourth year undergraduate students first, and by FGD's with midwifery lecturer's responsible for the training of the third-year undergraduate students.

3.5.2 TRANSFERABILITY

Transferability concerns the aspect of applicability, in other words how can the researcher's findings be applied to other contexts or participants (Brink et al., 2012). Korstjens et al. (2017) suggests that to enhance transferability, it is mandatory for the researcher to provide a thorough description of the participants and the entire research process. The researcher in this study provided a thick dense detailed description of the context of the study, sampling methods, data collection methods and data analysis techniques for a researcher, who may want to transfer findings to different or similar contexts.

3.5.3 DEPENDABILITY

Dependability relies on the aspect of consistency, whereby the researcher employs strategies to ensure that if her/his study must be replicated, similar results should be obtained (Korstjens et al., 2017). The researcher created a thick audit trail, which included a thorough description of all the research steps from the start of the project to the production and reporting of the research findings. All records from the study were stored and kept safely in the researcher's possession.

3.5.4 CONFORMABILITY

Conformability in qualitative research is when the researcher supports the findings, conclusions and recommendations with data (Brink et al., 2012), ensuring that information produced by the researcher is not a figment of her/his imagination rather evidence backed up by data collected (Kortjens et al., 2017).

- FGD's were digitally recorded and transcribed verbatim with field notes written concurrently.

- A collection of raw data, products of reconstructed data and the final draft were safely kept and will be stored for a period of five years.

- Coding was done independently by the researcher, with frequent consultations with her supervisor to discuss and finalise emerging themes.

3.6 ETHICAL CONSIDERATIONS

The fundamental responsibility for a research project to be conducted ethically lies with the researcher, it is imperative for the researcher to ensure that all phases of the study are carried out in an ethical manner (Brink et al., 2012). Research activities in African countries are increasing in numbers, and this growth calls for sound ethical review structures, which are done so by research ethics committees, who in turn abide by international guidelines for all research involving human participants (Mokgatla-Moipolai et al., 2014). Along with research ethics committees, the researcher must

abide to appropriate ethical principles when choosing humans as study subjects (Arifen, 2018).

3.6.1 PERMISSION TO CONDUCT THE STUDY

Permission to conduct the study was requested and obtained from the following:

- The Postgraduate Research Committee, on the 26th of June 2019 (Annexure 2).

- The University of the Witwatersrand Human Research Ethics Committee on the 26th July 2019, Protocol Number: M190708 (Annexure 3).

- Institutional permission to conduct the study at the University of the Witwatersrand was granted on the 10th July 2019 (Annexure 8).

- Faculty permission to conduct the study in the Faculty of Health Sciences was obtained on the 4th July 2019 (Annexure 9).

- Departmental permission to conduct the study in the Department of Nursing, to allow for students and lecturer's to be invited to voluntarily participate in the study was granted on the 4th of July (Annexure 4).

3.6.2 Informed consent

The concept of informed consent can be explained as the voluntary agreement from the study participants to be involved in the study, and is not merely a document to be signed but rather a procedure to be explained for sound understanding of the research and possible risks (Shahnazarain et al., nd). Brink et al. (2012) emphasises the importance of providing the participants with sufficient information about the study, to enhance participants understanding of the research and to further explain that should participants wish to refuse participation or withdraw from the study they are entitled to do so at anytime.

The researcher met with prospective participants to introduce them to the study and invite them to voluntarily participate.

- An information letter (Annexure 5) was distributed via electronic email and messenger to all potential participants prior to FGD's.

- At the FGD's hard copies of the information letter (Annexure 5) were distributed to all participants to read and ask questions for clarification prior to them signing consent for participation.

- In this study the participants of interest were the senor midwifery students (fourth year nursing students) , midwifery lecturer's and clinical facilitators who were enrolled, employed and affiliated with the selected nursing education institution. They all had a sound understanding of the information given to them by the researcher, as it was explained in English, the learning language of the institution which they belong.

- Consent to digital recordings was explained to participants, prior to them signing consent to digitally record (Annexure 6).

- The researcher explained that the all potential participants have the right to withdraw from the study at anytime, as to create a feeling of freedom of choice to participate.

3.6.3 Anonymity and Confidentiality

Anonymity refers to the protection of the participants identity during all stages of a research project (Polit & Beck, 2010) and confidentiality refers to the researchers responsibility to protect all information gathered from being disclosed to other individuals (Brink et al. 2012).

- Participants names and identity were not revealed in the data collection, data analysis and reporting of findings. Participants were allocated numbers during the focus group and these appear in the report.

- Total confidentiality could not be adhered to, due to the nature of a FGD however the researcher emphasised that participants should avoid discussing details that transpired during the FGD outside of the group.

- All information gathered was kept safe in a locked drawer, with only the researcher and her supervisors having access to it.

- FGD's were assigned a number and the participants with the group were allocated a number to ensure anonymity.

- All FGD's were transcribed verbatim without the names of participants to adhere to the principle of confidentiality.

3.6.4 Beneficence

This principle refers to the securing of the well-being of the participant, who has a right to protection from discomfort and harm (Brink et al., 2012).

- Potential participants were informed that the decision to participate in the study or not would not in any way affect their academic performance or reputation.

- The researcher reassured the participants that participating in the study would cause no harm, and if they wish to do so could withdraw at anytime of the study without facing any penalty.

3.6.5 Justice

Justice refers to the participants right to fair selection and treatment, the researcher must select participants that would best meet the objectives of the study rather than her own choice or preference (Damtew, 2018).

- Selection criteria of potential participants was determined by a formal inclusion and exclusion criteria.

- Participation in the study was voluntary.

- Treatment of all participants was the same, the same question was posed to all participants and all opinions were highly valued by the researcher.

3.6.6 Respect

Respect refers to participant's rights to self-determination and full disclosure of the research study (Polit and Beck, 2010).

- Voluntary participation of potential participants was emphasised by the researcher throughout all phases of the study.

- Respect was shown by the researcher through all interactions with potential and voluntary participants.

- During FGD's the researcher emphasised the importance of respecting one another's values and opinions.

- Potential and voluntary participants were not coerced to participate in the study with promise of benefits.

3.7 CONCLUSION

In this chapter, the research design and methods were discussed. In the next chapter the findings of the study will be presented.

CHAPTER FOUR

FINDINGS AND COMPARISON WITH LITERATURE

4.0 INTRODUCTION

The transcribed data was analysed using Creswell's (2014) steps of data analysis, data analysis resulted in two main themes and seven subthemes. The themes and subthemes discussed in this chapter appear in the order of frequency of mention among the five FGD's. Participants quotes are provided in italics to illustrate the findings and to provide the reader with a deeper understanding behind participants responses. The quotes are presented verbatim, and in the following manner: firstly, the participant number is provided (Px) followed by the focus group discussion number (FGx). The researcher also discusses the themes within the literature, providing support and a literature control for the findings from the focus groups.

4.1 FINDINGS

TABLE 4.1 THEMES AND SUBTHEMES

Themes	Subthemes
4.1.1 Midwifery skills that could benefit from simulated practice	4.1.1.1 Completion of documentation 4.1.1.2 Vaginal examinations 4.1.1.3 Management of the second stage of labour 4.1.1.4 Offering of psychological support
4.1.1Best facilitation of a simulation program described by participants	4.1.2.1 Use of standardized patients 4.1.2.2 The creation of a clinical journey for the pregnant women 4.1.2.3 Optimising simulation to narrow the theory-practice gap

4.1.1 Theme 1: Midwifery skills that could benefit from simulated practice

4.1.1.1 Completion of documentation

Documentation in nursing is a record of nursing care rendered to patients by registered nurses or other caregivers under supervision of the registered nurse, it is the primary clinical information source to fulfil professional and legal requirements (Tasew et al., 2019). Documentation on all health records in healthcare is used as a communication tool among healthcare professionals, therefore correct documentation is a vital task in midwifery as the profession has clinical and legal implications for the patient, midwife and healthcare institution (Dike et al.,2015).

The South African Department of Health introduced a uniform maternity document to all health care facilities, that provide maternity services at all levels, the document is referred to as a maternity case record. The intention of the introduction of the maternity case record is to improve the quality of care of pregnant women (Sibiya et al., 2015). Cele (2015) describes the case record as a client held document that outlines a combination of screening services and a variety of clinical assessments from the ante natal period right up until delivery.

The participants of this study highlighted the importance of accurate documentation on all maternal case records during the pregnant mother's journey to delivery. Participants expressed the perception that this skill is quite daunting when one is not well orientated to maternity record keeping.

" You're told go to page 22 and everyone knows what page 22 is…everyone is so familiar with the forms and all the paperwork and you are still new and you like what's page 22? So when they say form 22, page 22, and you like where? In the files? in the book?." (P3; FG1)

Participants expressed that labour ward nurses are very protective over these records, in particular recording on a woman's partogram, as any mistake could lead to possible litigation if filled in incorrectly and therefore students are not always trusted to fill them in.

“It was emphasised on should there be a litigation they would go back to that partogram, that is why it is stressful on how to fill it in.” (P8; FG1)

“ The nurses get really mad if you fill in the partogram wrong.” (P5;FG4)

The anxiety to fill in these records correctly in a limited amount of time, narrows the opportunity for the clinical staff to orientate or teach students on how to document correctly on an individual’s maternity record.

“It’s so much harder when you starting - the sisters would tell you I don’t want you to mess up my partogram and paperwork so I wouldn’t do it I would just look at the patient and some will be so busy to sit and explain and teach how to write it.” (P6;FG1)

Participants suggested that third-year nursing students should be introduced to the maternal health records prior to their clinical placements or at the time of witnessing births, along with guidance on how to fill in the different sections correctly, and given sufficient time to become familiar and orientated to the documents, especially in preparation for stressful clinical situations.

“Having the book (maternity case record) during a simulation would help.” (P1; FG3)
“In simulation the standardized patient can have the book(maternity case record) and during a scenario the student will have to document in the book according to how the scenario plays out.” (P5;FG3)

Sibiya et al. (2015) assessed the use of the maternity case record in improving health care, what was found was that 99% of midwives made it clear that it was not user-friendly and this made documenting in the case record difficult and open to mistakes. The researcher could not find any research from South Africa on midwifery student’s perceptions of their ability to complete the maternity case record, but one can assume if the midwives find it a difficult task, midwifery students would too.

4.1.1.2 Vaginal Examinations

Monitoring the progress of labour provides reassurance to the midwife that labour is progressing well; alternatively, the process of monitoring can bring to the midwives attention any deviation from the norm, which would call for necessary interventions to avoid fetal or maternal mortality (Downe et al., 2013). Vaginal examinations are clinical procedures which are performed regularly by midwives during labour and require considerable skill.

The purpose of this extremely intimate examination is for the midwife to determine the overall progress of the women in labour (Muliira et al., 2013). This is done by assessing the dilatation of the cervix and the descent of the presenting part in the pelvis. The effacement or thinning of the cervix is also important, as is the application of the presenting part onto the cervix (Downe et al., 2013).

Participants revealed across all five FGD's that vaginal examinations is a skill that third-year students are expected to conduct very early into their clinical placements.

" When you go to the clinical placement you (are)expected to, you don't just pitch up, like you have to know certain things, and no one can really teach you a PV on a human."(P1;FG1)

The FGD's with the midwifery lecturers, one of the participants voiced out that novice midwifery students are expected to perform vaginal examinations but under the supervision of a registered midwife.

"They will never do the diagnostic PV but they will follow (the midwife)." (P2;FG5)

The concern amongst the student participants was that the third-year nursing students are not well prepared for the skill going into the clinical placements.

"You get to the ward and they say do a PV and you don't even know where to begin." (P2;FG2)

“I would suggest that third years get the PV assessment skill before they actually go into the clinical practice, with me in third year I just got to the hospital, it was a maternity casualty ward and I was asked to do a PV so I didn’t have an idea of what to look for.” (P1; FG3)

A study done by Zidaric et al. (2015) looked at student midwives perceptions of intimate touch regarding vaginal examinations and what was found was that students were not prepared for the intensity of the procedure prior to their placements and this left them with feelings of distress.

Participants in this study agreed that to mitigate the effects of the unknown, going into the midwifery clinical placements, third-year nursing students should acquire the skill of pelvic vaginal examinations firstly though simulated practice.

“ It will be beneficial to give us a week or two of PV practice in the simulation lab prior to clinical placements.” (P8;FG2)

“ If you have gone through step by step of doing a PV in a sim lab, that simple step by step approach can give them(third year midwifery students) the confidence to face that skill in the wards.” (P3;FG5)

A study done by Roosevelt et al.(2018) acknowledges the difficulty educators face when preparing student midwives for the skill of vaginal examination. In order to help ease this process Roosevelt et al. created a multi-modal approach to assist students with this skill. The multi-modal approach highlights the importance of pre-clinical training of students for the skill of vaginal examinations and believes this can be achieved with the use of simulation. The above mentioned study notes that the use of a variety of task trainers, will allow students to gauge a deeper understanding of the visual, tangible and theoretical components of a vaginal examination.

4.1.1.3 Management of the second stage of labour

Participants across all of the fourth-year nursing student focus groups felt anxious in their management of the second stage in labour and recognised their need for preparedness when it came to its management. This feeling was echoed by the educators in their focus group who agreed that this stage of labour is stressful for both the student midwives observing and actively assisting in the birth.

"My first delivery was a total disaster I had the sister shouting in my ear, and she's shouting the baby's out and there's meconium everywhere It's just a traumatic experience doing it by yourself." (P4;FG3)

Both the students and educators who participated in this study agreed that repeated exposure to birth simulations would be beneficial to third-year nursing students prior to their clinical placements, as the simulations could potentially buffer out feelings of anxiety when exposed to the real deal.

"Before we are expected to deliver (a baby) we should have a simulation." (P2,FG1)
"I think even though it's a lot for them (3rd year nursing students) to take in, they need to have done quite a few simulations on birth, because that's where their highest anxiety is." (P1,FG5)

A study done by Davis et al.(2009) assessed the use of a childbirth simulator in midwifery education, participants of that particular study agreed that nothing could compare to the real-life situation, however the simulation experience conducted in a safe environment made them feel more confidant and less anxious going into their clinical placements. The belief that simulation can help prepare student midwives for a stressful clinical situation is supported by Amod and Brysiewicz (2019) in that simulation can decrease the challenges faced by student midwives through repeated experiential simulated practice.

4.1.1.4 Offering of psychological support

The loss of a newborn infant, also known as perinatal loss due to a miscarriage, stillborn or neonatal death is recognised as an extremely tragic event for a mother to go through, reactions caused by this grief results in the negative psychological impact of the mother (Kersting et al., 2012). This experience is also extremely emotional and challenging for midwives and especially student midwives who often do not have the life experience or the professional experience to deal with the issues surrounding death and bereavement and the need to offer comfort to the bereaving family (Mitchell, 2004).

During the FGD's there was great concern amongst the student participants with regards to handling a mother's emotions after she has had a stillbirth or if her baby had passed away after the delivery, they felt that they weren't equipped with a skill set to handle a situation of that magnitude, as described in these quotes:

"It's so hard when you get into a room and you working with a sister and you just delivered a stillborn baby you don't know what to do or what to say to the mother, you just become clueless." (P4,FG2)

"I found it very awkward, the mother was crying and I didn't know what to tell her and my silence was also uncomfortable, so I just avoided the situation." (P3,FG3)

Along with the negative impact a perinatal death has on the mother, evidence suggests that midwives are not adequately trained to deal with such a situation in terms of offering psychological support to the mother (Ellis et al., 2016).

Ratisslavova et al.(2019) suggests if educators implement a structured educational program on the understanding of perinatal loss coupled with objectives that serve to empower healthcare workers to better assist in this complex event, bereaved parents will receive improved support. Forster et al.(2006) supports this statement and describes the event as a highly emotive situation for the parents, and is therefore important to assist undergraduate student midwives with clinical simulations to help them develop and reflect upon their bereavement and support skills.

The general consensus amongst the student midwives FGD's was that there should be structure or protocol in place when it came to understanding how to deal with perinatal loss early in the introduction to midwifery, as to be better equipped to approach the different situations that novice midwives will experience in their clinical placements.

"People act differently to grief I think it will help if we had a structure to adapt to a variety of situations, I think that will be very beneficial in a simulation scenario"(P5,FG3).

4.1.2 Theme 2: Best facilitation of a simulation program as described by participants

4.1.2.1 Use of simulated patients

A simulated patient is a lay person who is trained and directed by a facilitator to simulate various scenarios for teaching, assessment and history taking purposes (Beigzadeh et al., 2016). Simulated patients help students practice clinical and communication skills, with the advantage of receiving feedback from a "patient's" perspective (Simmenroth-Nayda et al., 2016). Participants throughout the FGD's mentioned the use of simulated patients in a variety of scenarios, for history taking and simulation of the second stage of labour.

"Antenatal history taking can be practiced on a simulated patient, in an ante-natal clinic setting"(P1,FG4).

"The simulated patient can come in with her maternity case record, with being 4cm dilated and we can carry out actions according to how the scenario plays out" (P3,FG1).

Clinical teaching during real life encounters poses great difficulty amongst all healthcare educators and students as these real-life situations are often unpredictable and don't allow for effective teaching all the time. Structured simulated learning with

the use of simulated patients, allow students to practice both clinical and communication skills in a safe controlled environment prior to them embarking on their clinical learning in the real world (Williams et al., 2016).

Midwifery educators in particular face their own set of difficulties given the complex nature of midwifery situations, an example of this is post-partum hemorrhage a condition whereby a woman bleeds excessively soon after vaginal delivery and requires immediate intervention in order to save the woman's life (Fukami et al., 2019). Students therefore have limited experience of navigating emergency situations; this is where the use of simulated patients could prove beneficial. Simulated patients can play a variety of roles within a simulation based learning scenario, be it a mother in labour to an anxious family member, placing students in emergency situations within a simulation scenario with various role-players can challenge students cognitive, psychomotor and affective domains of learning (Lathrop et al., 2007).

"It will help to create a real time labour ward where we have to progress the mother up until she delivers, it can be a 30 minute scenario." (P7,FG4)

" We did a really good simulation earlier in this year, where we were in groups of three. One person had to mimic the delivery while wearing the' mama natalie' (delivery task trainer), the second person did the actual delivery and the third person managed the newborn. This should be done during the introduction of midwifery to third years." (P5;FG2)

Uys et al.(2014) embarked on a comparative study between teaching of clinical skills on a mannikin and a simulated patient, the results of the study displayed that students performed better with the simulated patient with regards to patient-centeredness and concluded that the use of simulated patients in clinical training of nursing students is advantageous as this method may help bridge the gap between simulated practice and practice with actual patients.

4.1.2.2 The creation of a clinical journey for the pregnant woman

Guidelines for maternity care in South Africa classifies three levels of care that pregnant women must receive in to optimise the success of their pregnancy journey. Women start by receiving ante-natal care, the main purpose of which is the identification and early diagnosis of risk factors. This is followed by perinatal care which involves care and management during delivery and finally, post-partum care with the objective of assessing and managing the well-being of the mother and baby after she has delivered.

The type of midwifery clinical skills that are practiced by midwives differ according to where in the journey the pregnant woman presents. The participants in this study, expressed value in creating a clinical journey of the pregnant mother when it came to teaching of midwifery skills, they felt midwifery as a whole is a complicated subject and to make it easier to contextualise, it should be taught according to the chronological order of the three levels of care.

" If you start with postnatal and then you go back to antenatal the patient has already delivered, how am I supposed to interact and engage with that content, when I don't even know what do when the mother is pregnant." (P4;FG4)
"I would have appreciated if we started with palpation and pv's then gone through to deliveries." (P1;FG4)

The FGD's with the midwifery lecturers however expressed concern over teaching of midwifery according the journey of the pregnant mother, because the midwifery clinical placements do not always correlate to teaching midwifery in a chronological way.

"They don't all go to one ward, some of them go to post-natal, some of them go to the labour ward, some go to the ante-natal clinic. So you have to make sure that you actually prepare them for the entire spectrum. You can't only prepare them for one part of midwifery." (P4;FG4)

The conduction of clinical teaching within midwifery educational programs has a significant role, as effective skills teaching will contribute to the production of competent midwives entering the workforce. Efficacy of midwifery educational programs should be investigated by both the students as well as the educators in order to improve quality of the program (Firoozehchian et al., 2012).

Antonio (2016) supports the use of a constructivist approach in training nursing students for the clinical setting, whereby students are expected to build their own knowledge from simple to more complex concepts through facilitation. Antonio reiterates that this approach encourages nursing educators to take into consideration, student views with regards to their learning processes in order to come up with activities and teaching strategies that benefit both the educator and nursing student.

4.1.2.3 Optimising simulation to narrow the theory-practice gap

Nursing education in general is a culmination of theoretical and practical learning experiences, with the main goal of equipping nurses with the knowledge and skill set to face and overcome challenges the working environment poses. A theory-practice gap is created when what is being taught during facilitated lessons by nursing educators does not correlate with what is being practiced in the clinical settings (Amro et al., 2017). The significance of this gap lies in the negative impact it has on nursing care and ultimately patient outcomes, leaving nursing students feeling frustrated when having to maneuver through the challenges the gap poses (Salifu et al., 2018). Student participants in this study described their experiences of practice-theory gaps, as having a negative impact on their self-confidence.

"What bothers me the most is that we learn something in class text-book style, you go to the ward and it's not done that way and then when you try do it the text-book way you (are) wrong. What is done in the ward and what we are taught is completely different." (P5;FG4)

"I think at school if we are taught the right way, it's just about being confident and say no but sister this is what the guidelines say and this is what I learnt in school, that's why I am choosing to do it this way, this is what I'm comfortable doing." (P8;FG2)

During the FGD's with the students discussions were had on how simulation could be optimised to assist in bridging the gap between what is being taught and what they are expected to do in the wards with regards to teaching of midwifery skills. A common suggestion that came up was improving the realism of the task trainer for the practice of PV's, and exposing third-year nursing students to the task trainer prior to their clinical placements.

"The real vagina is complicated so it will help if the task trainer is a bit complicated, texture plays a big role when it comes to finding what you looking for." (P1;FG3)
"It's (the vagina) slimy then there's secretions to take into consideration, the blocks that we are using are too simple." (P5;FG2)

Realism and fidelity in simulation talks to the representation of objects or situations being as close to real-life as possible, with advancements in technology coupled with simulation gaining momentum in nursing education great efforts have been put into producing task trainers that are close to reality as possible.

Another suggestion that came up was to include practicing midwives from the clinical placements to facilitate skills in the simulation lab, to better prepare students for what the expectation is of them in the wards.

"It will be nice to have a practicing midwife from the wards to come and teach us, things have changed such as policies and guidelines." (P4;FG2)

4.2 CONCLUSION

This chapter presented the research findings according to the themes and subthemes which emerged from the data analysis of the focus groups discussions with the participants. Findings were supported with literature. Chapter five will conclude the research report with a more in-depth discussion of findings, recommendations for clinical practice, further research and limitations of the study.

CHAPTER FIVE

DISCUSSION

5.0 INTRODUCTION

WHO designated 2020 as the International Year of the Nurse and the Midwife and published a State of the World Nursing Report. According to the report 9 million more nurses and midwives are needed to achieve universal health coverage by 2030. It noted the importance of attracting and retaining recruits to the profession and said that investing in training and more nurse-led services will enable nurses and midwives to practice to their full potential worldwide (World Health Organization, 2020) A takeaway from the WHO report pertinent to this research is the need for adequate and enhanced training.

Chapter two highlighted the challenges faced by midwives in South Africa. These included the shortages of qualified professionals; high maternal and infant mortality rates; a stressful work environment that acts as a deterrent to midwives staying in the profession. It also pointed to the need to strengthen midwifery training and how simulation can be used as a tool to this effect.

Chapter four discussed the findings of this study, which identified specific midwifery skills that could benefit from simulated practice prior to third year clinical placements. A crucial point noted was the high levels of anxiety experienced by the students as they went into the clinical areas for the first time. Their feelings of inadequacy and being emotionally vulnerable stemmed from their perceived unpreparedness for certain midwifery skills.

The discussion in this chapter, considers the importance of designing educational material that speaks to the affective domain of students during skill acquisition and why it is important for better preparation of potential future midwives. As identified in this study, one way of doing this for third-year nursing students is by making the learning experience a safer space for learning which is aligned to the simulation pedagogy.

The report will conclude with remarks on the limitations of the study and makes recommendations for the application of the findings in midwifery curricula for the continuous aim of improving midwifery training and the learning experience of the students.

5.1 DISCUSSION FROM FINDINGS

The aim of the discussion and findings is to add knowledge to the nursing profession with regards to understanding the perspective of senior midwifery students (fourth-year nursing students) in terms of how they can be better prepared, with the use of simulation, for entry into the maternity wards.

A central theme that came up throughout this study were their negative feelings that the student participants experienced when carrying out identified specific midwifery skills during their time in clinical placements. Feelings of anxiety and frustration stemmed from the pressure of having to conduct skills early into their clinical placements without sufficient preparation.

Simulation as a teaching and learning strategy creates a safe environment for skills practice and allows students to reflect on negative feelings that may arise in the clinical area (Mohammadi, et al., 2019), thus reducing stress and anxiety within clinical student education. The participants gave suggestions on how best simulation could be facilitated to better their negative experiences during their clinical placements. The skills identified could help form part of a guide for midwifery educators, looking to formulate a simulation program for their third-year nursing students.

5.1.1 Best facilitation of a simulation program based on findings of this study

5.1.1.1 Preparation of simulation patients for simulation scenarios

During FGD's with the student participants, the use of simulated patients for midwifery skills practice in simulation scenarios was brought up frequently, particularly for the skills of documentation; management of the second stage of labour and offering of psychological support to grieving mothers.

Simulation based education with the use of simulated patients has gained popularity amongst nursing educators, as it creates a safe environment for students to practice their nursing skills with the added benefit of receiving patient feedback to maximize their learning experience (Williams & Song, 2016). Felix & Simon, (2019) describes the benefits of using simulated patients in nursing education, as enhancers of scenario fidelity as well as evoking increased engagement amongst students as compared to the use of manikins. Selecting simulated patients who have had children would bring a richness to the experience and student interaction. However for this to occur it is important for the nursing department to have a simulation patient program that has a bank of trained simulated patients available for simulation for effective planning and communication, between facilitator and simulated patient, prior to the simulation exercise. A clear understanding by the simulated patient of the student's learning objective for the simulation ensures that the student's learning objectives are achieved, it is the simulation facilitator's role to make sure the simulated patient fully understands her role and dialogue during the simulation.

5.1.1.2 Facilitation of skills according to the clinical journey of the woman

The teaching of midwifery skills in a chronological order from ante-natal to post-natal was suggested by the student participants. The student participants in this study, felt that if midwifery was taught in this way, it would be easier to contextualize the journey of the pregnant woman, making the reason for certain skills to be conducted relevant, to the rationale for skill. The midwifery educator participants found this suggested way of teaching challenging, as students are not exposed to the clinical environment in a chronological sequence, the students are placed in a variety of wards from the start of their midwifery clinical placements.

Often within student and educator relationships there is a disconnect between what the students deem as optimum teaching strategies verses what educators view as what's best for their learners. A resolution to this is for both students and educators to come to a consensus of what will be the best teaching strategies to attaining learner objectives (Froneman et al. 2016).

It is the researcher's suggestion that midwifery lecturers could design their simulation programs to teach midwifery skills in a chronological order in a simulation program, to prepare students for the variety of settings that they will be exposed to in the their practical's.

5.1.1.3 Optimising simulation for specific midwifery skills practice

During FGD's with student participants a suggestion of bringing in practicing midwives from the clinical placements, to teach during a midwifery simulation program was met with hesitation from the midwifery lecturer's as their view was that not all midwives are teachers. Perhaps this conflict of interest could be addressed by midwifery educators identifying practicing midwives, who they deem are able to effectively assist with teaching of midwifery skills within a simulation program to uphold the quality of their teaching.

An equipment related issue raised by the student participants was the realism of the models they are taught to practice skills on, particularly that of the PV task trainer. Student participants felt the silicone blocks that they use were too simple and didn't replicate the real feel of a woman's vagina whilst conducting a PV. Task trainers for use in simulation have evolved over time, with regards to replicating real-life body parts or bodily functions. These advancements unfortunately are expensive and purchasing of these trainers are dependent on institutional or departmental funding. Motivation for purchasing of these products can be made by midwifery educators to present to their departments, if they are certain that a specific task trainer can meet student objectives for a certain midwifery skill and allow for adequate practice opportunities for all third year midwifery students. Sharing equipment and resources with nursing schools that are geographically close could also save on the duplication

of equipment in the individual nursing schools, making more funds available for the buying of equipment.

5.2 RECOMMENDATIONS

5.2.1 Educator and students' discussions

The advantage of involving student suggestions and opinions when designing learning material is important, as that it allows for student buy-in and motivation towards their academic learning. Nursing departments need to ensure that discussions between educators and students regarding academic activities are held frequently, in this way educators can become aware of student barriers to gaining competence and confidence in skills acquisition and how best to mitigate these challenges. Students will also be more aware of the educator's limitations to providing various forms training.

5.2.2 Designing a simulation program to best address student challenges

The affective domain of learning is a culmination of student's attitudes, beliefs and values towards their learning and if this is compromised by poor experiences and anxiety it has a negative impact on the future of student learning (Krause, 2016).

The designing of a simulation program for the first two weeks of novice midwifery students training, that inculcates affective learning could help prepare third-year nursing students and reduce their anxiety about their competency levels during their initial ward or skills experiences.

A study done by (Blackmore, et al., 2014) evaluated the effectiveness of simulation based programs on the improvement of clinical skills for undergraduate medical students entering their new professional roles, the results of the study showed significant improvement on students clinical skills knowledge and confidence. The collaboration of registered nurses from midwifery wards and simulation coordinators, can assist the midwifery lecturers in the designing of a simulated program based on the findings of this study.

A well designed simulation program has the potential to address both the technical and affective aspects that midwifery skills required, with the additional benefits of

repetitive skills practice, and the embedding of midwifery practice through the journey of the pregnant woman with the adherence to patient-centeredness, and best simulation practices within a safe environment.

5.2.3 Nursing Research

Currently there are few intervention studies that evaluate the efficacy of midwifery skills training with use of simulation, it is important to assess the training of simulation skills practice in order to improve on knowledge and highlight where student's skill training can be improved (Lendahls & Oscarsson , 2016). Findings of this study are to be shared with midwifery lecturer's to determine whether the findings will prove useful when creating a simulated program with regards to meeting student objectives.

It is also suggested that Midwifery educators and simulation coordinators conduct research to investigate the effectiveness of simulation programs in meeting the student's learner objectives and assist with the development of evidenced based midwifery simulation programs.

An accredited midwifery simulation program could be shared with other nursing institutions, to encourage collaboration on best practices and approaches to midwifery skills teaching within midwifery education.

Further research could be done on the effect of using simulated patients who themselves have experienced childbirth, and the value that they add to student's confidence in approaching patients.

Research is also recommended on the best available simulation equipment that is available in meeting the needs of students.

5.3 LIMITATIONS

Total population sampling was used and therefore only participants who were available to participate in the study were involved.

Clinical facilitators who are based in the clinical environment and responsible for the training of third year midwifery students were invited to participate in the study, however, were unable to attend. The researcher felt that, they might have added additional information or a different perspective about novice midwifery skills training.

The discussion and findings reflect a unilateral viewpoint as the educators are under-represented in this study.

The setting of this study was one selected nursing education institution; therefore, findings of this study cannot be generalised to the perceptions of other nursing students from different contexts.

5.4 CONCLUSION

The objective of this study was to identify specific midwifery skills that could benefit from simulated practice prior to third-year clinical midwifery placement. The findings of the study not only identifies midwifery skills but in addition reveals participants negative feelings when conducting identified midwifery skills during ward placements. Participants together with the researcher gives suggestions on how best simulation can be facilitated for developing confidence in neophyte student midwives before their first clinical placement.

ANNEXURE 1
INTERVIEW GUIDE
Identification of third year midwifery skills that could benefit from simulated practice prior to clinical midwifery placements

Estimated time: ± 40 minutes

Time	Activity	
0-5min	• Welcome • Introduction of members • Aim of the interview • Signing of relative consent forms • Ground rules	Rules: • Confidentiality • There are no wrong answers • Feel free to speak out • All ideas are important • Respect of others ideas, even if one doesn't agree • Cell phones on silent
5-10min	Definition of terms	• Midwifery clinical skills • Simulation • simulation program
10-30mins	Start questions	• probe • open ended questions • give others a chance to talk, avoid one person domination i.e. redirect discussion • keep checking if receiving specific answers • avoid derailing of topic
30-35mins	CONCLUSION	THANK YOU, REFRESHMENTS TIME

INTERVIEW QUESTION: **Which third year midwifery clinical skills do you feel, would benefit from simulated practice, prior to the third years being placed in their specific clinical placements?**

Probes:

- Why that specific skill?
- Tell me more
- How would it benefit from simulated practice?
- Could you elaborate on that point?
- Can you relate to this?

ANNEXURE 2: POST GRADUATE COMMITTEE PERMISSION

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Private Bag 3 Wits, 2050
Fax: 027117172119
Tel: 02711 7172076

Reference: Mrs Sandra Benn
E-mail: sandra.benn@wits.ac.za

26 June 2019
Person No: 1844807
PAG

Mrs K Singaram
5 Tampa Springs
44 Seder Road
Winchester Hills
2054
South Africa

Dear Mrs Kerry-ann Singaram

Master of Science in Nursing: Approval of Title

We have pleasure in advising that your proposal entitled *Identification of third year midwifery skills that could benefit from simulation practice prior to clinical midwifery placements* has been approved. Please note that any amendments to this title have to be endorsed by the Faculty's higher degrees committee and formally approved.

Yours sincerely

Mrs Sandra Benn
Faculty Registrar
Faculty of Health Sciences

ANNEXURE 3: PERMISSION FROM HUMAN RESEARCH ETHICS COMMITTEE

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

R14/49 Kerry-Ann Sangaram

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)

CLEARANCE CERTIFICATE NO. M190708

NAME: (Principal Investigator)	Kerry-Ann Sangaram
DEPARTMENT:	Nursing
PROJECT TITLE:	Identification of third year midwifery skills that could benefit from simulated practice prior to clinical placements
DATE CONSIDERED:	26/07/2019
DECISION:	Approved unconditionally
CONDITIONS:	
SUPERVISOR:	Dr Hilary Thurling
APPROVED BY:	Dr. C Penny, Chairperson, HREC (Medical)
DATE OF APPROVAL:	06/09/2019

This clearance certificate is valid for 5 years from date of approval. Extension may be applied for.

DECLARATION OF INVESTIGATORS

To be completed in duplicate and **ONE COPY** returned to the Research Office Secretary on the Third Floor, Faculty of Health Sciences, Phillip Tobias Building, 29 Princess of Wales Terrace, Parktown, 2193, University of the Witwatersrand. I/we fully understand the conditions under which I am/we are authorized to carry out the above-mentioned research and I/we undertake to ensure compliance with these conditions. Should any departure be contemplated, from the research protocol as approved, I/we undertake to resubmit the application to the Committee. **I agree to submit a yearly progress report**. The date for annual re-certification will be one year after the date of convened meeting where the study was initially reviewed. In this case, the study was initially reviewed in **July** and will therefore be due in the month of **July** each year. Unreported changes to the application may invalidate the clearance given by the HREC (Medical).

Principal Investigator Signature _____ Date _____

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES

ANNEXURE 4: PERMISSION FROM HEAD OF THE NURSING DEPARTMENT

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG | DEPARTMENT OF NURSING EDUCATION

Kerry-Ann Singaram
c/ o Centre for Health Science Education

04 July 2019

PERMISSION TO CONDUCT RESEARCH STUDY.

Kerry-Ann Singaram

This serves to confirm that I support your request to conduct a focus group study, with the undergraduate nursing students, to identify midwifery skills by way of simulation practice.

Kindly liaise with the course coordinators of a suitable date and time when you can undertake the project.

Research Topic: *"Identification of third year midwifery skills that could benefit from simulation practice prior to clinical midwifery placement. "*

Yours sincerely

Professor JE Maree
Head: Department of Nursing

Department of Nursing Education | School of Therapeutic Sciences | Faculty of Health Sciences
7 York Road, Parktown, 2193, South Africa, Tel: +27 11 488-4272 | Fax: +27 11 488-4195
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THERAPEUTIC Sciences

ANNEXURE 5: INFORMATION LETTER

INFORMATION LETTER

Identification of third year midwifery skills that could benefit from simulated practice prior to clinical midwifery placements

Hello

My name is Kerry-Ann Singaram; I am a student at the University of the Witswaterstrand, studying for a Master Degree in Nursing Education. As part of the course requirements I am expected to conduct a research report under supervision. Research is a step by step guided and controlled process that is used in order to answer a research question, which for this study is: What specific midwifery clinical skills could benefit from simulated practice prior to placement of undergraduate third year nursing students, as an adjunct to clinical task training

The purpose of this research aims to develop a simulated midwifery program to benefit third year undergraduate midwifery students, with regards to their preparedness for their midwifery clinical placements.

I am inviting you to take part in this research study.

What is involved in the study: you will be invited to join a focus group interview. This means you will be interviewed as a group of students of the same level of training. The focus groups will consist of 8 per group, every participant's view will be considered very important, and will not be used against the participant. It is estimated that the focus group will take 30-40 and will be digitally recorded with your consent, there will be a co-facilitator who will assist with note taking.

Members of the focus group will be asked to discuss which midwifery skills they feel would benefit from being practiced in a simulated environment prior to midwifery clinical placements, followed by prompting questions lead by the researcher.

Risks involved in the study: choice of participation in this study is voluntary, and no risks will be attached to participation or not.

Benefits of being in the study: there will be no financial benefits if choosing to participate in this study, however, participants will have access to findings of the study upon completion

Participation is voluntary: Participation in this study will be entirely voluntary, and withdrawal from the study can be done at any time if the participant wishes to do so, without the participant being charged or penalised.

Confidentiality and Anonymity: Researcher will encourage confidentiality within and out of the focus groups by making participants aware that discussions in the focus group should not be discussed outside the group, however absolute confidentiality cannot be guaranteed. If a direct quote is made of anything a participant says in the report, this will be done so anonymously, whereby there will be no mention of names.

Approval and permission to do the study will be obtained from Human Research Ethics Committee, and from the Post graduate Research committee of the University of the Witswaterstrand.

Human Research Ethics Committee administrator and chair may be contacted on this number (011)717-1252 to report any complaints/ problems related to the study, or if you would like to understand anything relating to your safety while participating in the study.

Name and contact numbers:

Researcher: Kerry-Ann Singaram	(083 742 5483)
Supervisor: Dr. Hilary Thurling	(011 717 2548)
Co-Supervisor: Mrs. Claire Bracher	(011-488-4268)

ANNEXURE 6: CONSENT FORMS

(1)PARTICIPANT CONSENT SHEET

Identification of third year midwifery skills that could benefit from simulated practice prior to clinical midwifery placements

1. I have been given a Participant Information Sheet which explains the nature and processes involved in this study, which is attached hereto;
2. I was given time to read it, or had it read to me, in the language I best understand;
3. I was given time to ask any questions I wanted to and found any answers given to me to be reasonable and satisfactory;
4. I believe I fully understand why the study is being conducted and what the intended outcomes will be;
5. I understand that there will be no immediate benefit to me, should I agree to participate, nor will I receive any payment; conversely, participation will not cost me anything but my time;
6. I understand that, even if I initially consent to take part in the study, I may subsequently withdraw at any time and would not be required to give any reasons; if that happened, any data collected about me for the purposes of the study would immediately be destroyed, unless I give consent for it to be retained
7. I have been given a range of contact details, listed below. If I require further information or become concerned about any aspect of this study I am free to speak to any of these contacts.

Name and contact numbers:

Researcher: Kerry-Ann Singaram (083 742 5483)

Supervisor: Dr. Hilary Thurling (011 717 2548)

Co-Supervisor: Mrs. Claire Bracher (011 488 4268)

Name of Participant: _____
Date: _____
Place: _____
Signature or mark _____

Witnessed by:
Name of Witness: _____
Signature: _____
Date: _____

ANNEXURE 7: PART OF TRANSCRIBED DATA

IDENTIFICATION OF THIRD YEAR MIDWIFERY SKILLS THAT COULD BENEFIT FROM SIMULATED PRACTICE PRIOR TO CLINICAL MIDWIFERY PLACEMENTS

Transcript of first FGD with fourth year midwifery students held on Sunday 16 November 2019 at the university of Witwatersrand.

Present: Kerry-Ann Singaram (Master's Graduate Student), Dr Hilary Thurling (Supervisor) & Fourth year Midwifery students from chosen research site

Facilitator referred to as KS Co-facilitator referred to as HT Participants: Referred to as P1, P2, P3, P4, P5, P6, P7, P8

Duration: 1hour, 3minutes and 48 seconds

Discussion

KS: Morning guys, thanks for coming and attending the focus group so I've given you all information letters are you all happy with that. Have you any questions based on the information letter?

So what I am going to do now is hand out the consent forms for you to sign, please. So it is basically saying that you came here voluntarily and that I didn't force you to come. And ja, you can read through it and sign at the end if you happy.

[about five minutes taken to read through the forms]

KS: Oh sorry I forgot to mention that the last part says that you are consenting to digital recording.

KS: When you done you can pass them to me, thank you. Do they keep the information letter?

HT: Yes, and they keep the consent.

KS: Okay, can we start. I'm just going to formally introduce myself. I'm Kerry Ann Singaram and I'm a Master student and it is required for me to complete a research report in order to obtain the qualification of a Master's Degree and within my research I will need to conduct focus groups with the current fourth years in the nursing program so thank you again for coming. My supervisor is Dr Hilary Thurling and she'll be here to co-facilitate as well as take down notes as I may miss things that she'll take note of, and then because it is a focus group discussion, pure confidentiality can't be obtained because you will see each other and see what each other is saying. I just advise that outside this room that it's not discussed. And please feel free to speak out there is no judgement here, I need information in order to get my findings so please speak and all ideas are important and we can just respect each other's opinions and if you can please keep your phones on silent so that we don't have a distraction. So what I'm going to do, I'm going to pose a central question, okay, to the group and then ask you to elaborate on it. And then, I will ask probing questions and Hilary can interject if she feels that she needs to.

KS: Okay, is everyone aware of the definition of simulation, before I pose the question. Does anyone need clarification of what simulation is?

All participants: No

KS: Okay and midwifery clinical skills?

All participants: No

KS: So is everyone fine with those definitions?

All partcipants: Yes
KS: Does everyone understand what a simulation program is?
All participants: Yes
KS: Okay, so the central question I pose to you then is, which third year midwifery clinical skills do you feel would benefit from simulated practice prior to the third years being placed in their specific clinical placements. Everyone fine with that question? So the floor is yours guys, please
P1: PV's
KS: Okay, so it is your pelvic vaginal examinations?
HT: Shall we give numbers. So we'll give each person a number [counts out the numbers until 8] and then when it is written up you might be quoted but by your number, like participant one in interview one raised the issue of PV.
KS: Let me just write down the numbers or shall we just go round
HT: We'll go round so you'll be referred to by your number
KS: Yes, P1 you were saying PV's and why do you say that?
P1: Because when you go to the clinical placement you expected to, you don't just pitch up, like you have to know certain things, and no one can really teach you a PV on a human.
KS: Okay yes, it's kind of invasive
P1: Ya, and you never felt that before so you go to clinical placement and the midwife will tell you to do a PV but you don't really know what a four centimeter feels like.
KS: Okay
P1: So I feel like we could benefit from that.
KS: Were you put into a position where you had to do a PV without having practice and didn't know to estimate
P1: Yes
KS: Okay
P1: Yes, you try and go in and they tell you it's at four centimeters but like if you encounter another four centimeters it sometimes doesn't feel the same so you end up being unsure about that particular skill.
KS: Can anyone of the group relate to what P1 has said and can I get why
P5: For me, I wasn't signing off PV's even in my skills book because every time I did a PV I felt like I didn't know what I was doing. So it took me like, I think I only started really signing my PV's at the beginning of this year because then I felt like I actually knew what I was feeling for, I knew what I was trying to find. Otherwise I would just go in and the sisters would say do not come out until you can tell me what you are feeling and you like want to say but I don't know what I'm supposed to be looking for. So in January we do have these small silicone vaginas that we get to practice PV's but they do not feel like what it feels like for real.
KS: So it is not a pelvis
P5: No it's not a pelvis. It's a box, a square box and in the back it says how many centimeters you're feeling, but it is very different from what it feels like naturally. Sometimes you go in especially like a multiparous os and when you go in oh she's two centimeters and she says she's four and the nurse would go in and say she is only a tip of a finger. But I would think it is a mulriparous os and those block things don't have that, it's just a box. Learning PV's took a long time for me to get.
KS: In your third year you are expected to do PVs are you supposed to sign it off in your work book from third year?
Many voices: Yes

KS: okay, anyone else with an experience of a PV that you weren't equipped to deal with going into your clinical placement, you can elaborate
P3: I had to do a PV …. felt ya I got this, but I was not really in the cervix so I was measuring something, but don't know what [group laughter] … then one of the nurses said go in, try going into the back can you feel one two three and also whenever I did a PV I just thought centimeters anything else I don't know what you mean [group laughter].
KS: And tell me how was the mum's response, the mum that you were PV'ing, did you have to go in multiple times did you cause discomfort to her
P5: Ya, now that I am more familiar, I usually tell them, I'm going to do a PV, but I'm just going to call a sister to confirm. I'm going to call someone to do it again. Sometimes, when you go an ask a sister to come and confirm and she would say okay go back and feel what I just told you to feel by now you're in this woman's insides three times, going in and out of her and you can see she is in pain and she is uncomfortable and you still need to do it multiple times, so you can learn. So I don't think it was a fun experience for the patient.
P3: With the one I had I did not have any problem. Also the sister said she was going to check and she didn't have a problem and she wasn't really discomforted. She was still in the early stages of labor.
KS: okay, anyone else wants to comment on the PV as a skill to be practiced. In simulation how do you think that it could be practiced
P7: They had like a pelvis and then with the stations, that's when I knew how to assess for a station, but then previously it was very difficult. I didn't know what I was feeling, how to assess, I was just going in and out.
KS: When you say a station what was it, was it as osce station
P7: No like the station for when you are doing PV's
KS: Oh I see
P7: If they can do that earlier, before placements, it would help
P1: We only did that this year
HT: Can I just clarify something do you think, first of all I thought you said that simulation didn't help you and now, is there a new simulation?
P5: There are ones that are like square boxes, sort of like a vagina with just the opening, where you try to estimate your centimeters only. Then there is another one, where the instructor can adjust the station as well, there's a whole head coming up. Then we go in. It's a whole pelvis instead of just that small vagina. It's a whole pelvis and then it's easier to use that one with the full pelvis.
HT: That one you only experience now in fourth year?
Many voices: Yes
HT: Would you understand it if it was done in third year?
Many voices: Yes
HT: At the beginning of third year?
Many voices: At the beginning
HT: You would be able to pick up, what you were saying, the stations and the dilatation… [sorry interjection]
KS: Just something came to mind. If you miss the centimeters what impact does it have on the mum. If someone can comment on that. Just say the mum is two centimeters and you estimated four centimeters. Tell me comment on it please
P5: Like B said I think we had so many cases where patients were to be transferred from the latent phase to the active phase, where the patient was two centimeters, or we think the patient is fully dilated, but a patient is only eight centimeters and she is

being told to push, it doesn't only affect the mother but affects the baby as well, because the baby's head gets squashed into this small diameter, the mother becomes tired so it's a whole mess.
KS: What impact does it have on the baby, if someone can please elaborate on that, being pushed out not being fully dilated
P3: The baby can have caput … the caput and the baby comes out with swelling on the head because the mum sort of pushed when the cervix was quite tight not yet fully dilated and that's what it does to the baby.
KS: Okay, is everyone ok to move on to a possible, another skill that could benefit from simulated practice, so any suggestions.
HT: I just want to ask. So you are all in agreement that PV was your most stressful or is there something else, did it just come to mind straight away. Is there anything else that you think was very stressful?
Many voices: The labor process, delivery, is the most stressful
P1: The paperwork
KS: And the paper work
P1: yes … the paper work … never go there…[laughter]
P3: [You're told] go to page 22 and everyone knows what page 22 ... everyone is so familiar with the forms and all the paperwork and you are still new and you like what's page 22. So when they say form 22, page 22, and you like where? In the files? in the book?
KS: So did you not get orientation on the paperwork
Many voices: No, just the partogram later on
P6: It's so much harder when you are starting. Sisters will tell you, I don't want you to mess up my papers so I would actually do it, you just go and look at the patient. And some say we are so busy, I don't even have the time to explain to you and teach you how to write it. So it took a long while before someone could tell us this is how you are going to fill it. It took a long time to understand what is actually happening in the partogram. You need someone to explain this is how you fill it … you look at that you use this.
P5: And you only got taught how to fill it out and understand what is happening with the partogram earlier this year
S: and those were only the partogram not the whole part of the paperwork.
KS: so, you think if in third year, before you go into the midwifery wards, would that be beneficial to be orientated … in early third year
Many voices: Yes
Many voices: We should learn to do the paperwork when we first witness a birth
P5: I think it would help. Also midwives do things differently, but if we could just get a structure of once the baby is delivered … what do you write, how do you summarize the whole labor process.
P5: Yea, we need to get orientated. How do you summarize the whole labor because other people would say, you don't have to mention this, it was mentioned before in the beginning. Another person would say, the person who reads this thing needs to understand everything about the baby. So it would be nice to sort of have a template of how to or an example of how to summarize the whole labor
P6: Even the guidelines don't explain that to you, it just shows the partogram it does no explain
KS: So the partogram, when were you exposed to that and how to document and how to read it
Many voices: At the end of last year. It was at the end of last year

P1: It wasn't at the start it was at the end of last year. It was supposed to be a question in the exam, so we were going through stuff that we did in class or that we spoke about in class, stuff mentioned in the class, it was like a revision
P8: It was emphasized that should there be a litigation they would go back to that partogram that is why it is stressful on how to fill it in
KS: I was going to ask you what are the implications of not doing your paperwork correctly
P3: If something happens, if there is litigation then they look at the partogram, and they will go back and ask but who filled in the partogram and you are going to be called to be accountable for the partogram you filled in. So I tried very hard not to fill it in, as much as I progressed the woman. So you tell the sister okay this is what I find can she fill it in.
P6: Or you rather write it on a piece of paper, I write my findings and then she can put it on the partogram, because I am so scared for them. And then also, nurses get mad if you fill it in wrong. Like they get really angry if you fill in the partogram wrongly.
KS: Is it because they would be legally liable
All: Yes, it is very serious, it is difficult, because you're the student
KS: Are you expected to fill it out as part of your work book
All: Yes
KS: in what year
All: Third year
KS: Wow! Because you register in third year and you need to start delivery in third year
P5: so our deliveries aren't just summarized as to how long was second stage. It is not a summary we do the whole delivery routine … initiate the labor and your findings, you need to do progress the woman, you need to do the partogram and your whole management, that's how we write our deliveries in our workbook. So we need to know how to do the partogram, beforehand.
P3: Okay and just speaking about the whole workbook and it is literally a photocopy of what in the woman's book and our book, which is a bit unfair, because when you look at other colleges or other schools it is literally one page where they have the name of the patient, how long was the second stage, time of delivery and that's all. That's all they need for their requirement. Yet we need to fill out the whole three pages. Where you already tired by the time you have to fill in your own book you're really tired. Nurses say no we not going to sign, you will come back another day
KS: Is it necessary for you to have that three pages
Many voices: Yes, well no…
P7: I think it helps me, okay if I was taught how to fill it in and I knew exactly what to do in my own book. It would help me way better to fill in the patients one and to have more confidence in filling in the patient's paperwork, unlike now. Sometimes you are delivering back to back patients and the paperwork is a lot and having to go back…If you know it better, it will be easier to write it out and you spend less time doing it so you can attend to the next patient. So I think it is beneficial. It helps the staff, helps the ward, when you guys are in the ward it makes things just easier.
KS: so what I'm gathering, you can correct me, if I'm wrong. In third year do you think that the third year students should be more orientated to their workbooks and how to fill it in
P5: Yes, the workbook and the woman's white book –
P3: The maternity record of the woman. It would be nice if it was explained from the beginning of third year

KS: So does anyone else want to comment on the documentation and the paper work
HT: Can I just ask you can you clear because we are not in labor ward ourselves. What is page 22, you referred to that earlier.
P7: It is a summary of the actual labor, that happens, so from when the woman started bearing down, from the ruptured membrane, started bearing down.
Many voices: from when it started bearing down
HT: Is that a Gauteng Department of Health document?
Many voices: Yes
HT: Is that standard across everything?
Many voices: Yes
HT: Okay and then what you referred to P1 to different documentation between certain places. What documentation is that?
P1: So what's in the book
HT: Now what are you referring to as the book
P1: What's in the maternal record is the same as what is in our book, but when comparing…
HT: but the book, what you're referring to as the book is it the Gauteng Department of Health Book
P3: The Gauteng Department of Health book is the same as our skills book, in terms of all the pages
HT: Is it or is it not the same
P3: it's the same
HT: it's the same
P3: But when you compare it with Ann Latski students, they have a different system of recording their deliveries compared to us.
P2: Even UJ [University of Johannesburg] their method is pretty much the same
HT: So the Wits nursing book, you have a book correct. It is different to other colleges
Many Voices: Colleges.
HT: Ours is three pages and theirs is one page
Many voices: It's not even a page, It's a line, it's a table.
P2: It's a table
HT: and then I think there was a difference of opinion here, in that some people thought it was a good idea to have the three pages and other people thought it wasn't a good idea.
Many voices: yes
P1: I feel it is only a good idea because you weren't properly orientated on the paperwork initially. We feel like this only because we weren't properly orientated to do the paperwork.
HT: If you properly orientated to the Wit's three page book?
Many voices: If we were properly orientated there would be no need for the skills book
P3: If you were properly orientated on how to write the notes and how to fill it in all the time, then there is no need for the skills book, then you can go and practically do it on the actual patients book and then just record it in your skills book, you can do away with the three pages in the Wits skills book
P1: Yea, instead of writing the notes twice.
Many voices: That's what we do we write the notes twice.
HT: they should see you properly orientated to the Wits's three page book,
Many voices: and the maternal record.
HT: In the beginning of third year.
Many voices: Yes

P1: Then the wit's skills book does not have to be so long
P1: Then you don't have to spend the last two hours of your shift, writing your notes, then you rush because the sister in charge is not going to sign if she does not see everything.
HT: Which book does the sister sign off on.
P3: The skills book and she needs to counter sign the patient's record as well because you are a student and they are the sister, so they just need to countersign
P2: By the time you get to fourth year, they tell you, you are a sister now so you write the records.
P5: Those are the same sisters who didn't want to show you last year how to write it
P4: At Hillbrow I had a different experience. The sister was very helpful and she guides you with everything. She tells you what to do on the maternal book, guides you and tells you if you have a problem come to her. I learnt from the maternal book and she guided me. Thereafter, I had to go and write in my own skills book and I felt there was so much paperwork, you had to write in this book then that book. I feel personally the skills book does not have to have three pages, because I learnt from the maternal book.
HT: How long is the maternal book is that the one page.
Many voices: No it got everything, partogram, summary, notes, as well as on the baby, it is about five, six pages.
HT: I think I got that clear
KS: how can that be done in simulation. Where you could you be better orientated to do the paperwork. Do you think a scenario can be set up?
Many voices: Yes
KS: How
P3: Yes, the patient can have a book when she comes in. This gives you a scenario, when the patient comes in… this is what the patient is complaining of. If for example she is already four centimeters and she comes in as 4 centimeters. You see that she is four centimeters, then you plot her because other sisters don't want to initiate the labor unless she is three centimeters. If she is one centimeter then they say don't even start the initial assessment because she might be too long and it might make the labor seem to long which is also dangerous so they like don't start it unless she is three, then everyone starts it at three and you don't know this because the sister tells you later. Sometimes she comes in and she is only one centimeter or tip of finger and you think because she is admitted let me start the labor and the sister comes later and says no don't start the labor they are going to observe her.
So when a patient comes in they tell you whatever condition or state of the patient then you know what to do with the book. Then you progress that patient until she delivers and then you write those notes as well and you go with the book. Having the actual book with the patient at simulation would be nice.
KS: Thanks! I want to now go on to the actual labor because that's what you brought up you said it was the paper work and now the actual labor. So tell me going into your first delivery in your third year how did you feel were you prepared
Many voices: No….noooooo
[laughter]
P2: I cried
KS: You cried
P5: Yes, I cried because there is so much pressure and so many people in the room and you don't know what you are doing. I mean the only thing we learnt before going into labor was watch videos

P3: Of people from Kenya, you watched videos, we don't know which side we should be standing, what we should do, what happens after birth; restitutions after birth –do you let the head turn or do you turn it. It's a lot. We only learnt mechanisms of labor mid-year. It was a test, it wasn't in a lesson. We only learnt when we came here, was it last year or middle of this year, when we came here, with the doll, that was when we actually learnt the mechanisms of labor.
KS: Ok
P3: Also it's nice to know the mechanisms of labor and restitution – how the baby turns and how the baby is coming out, but there are other things like supporting. If you going to do an episiotomy how are you actually going to do if you are going to do certain skills within the labor, how are you going to actually do it, because most of the time it is only mentioned. But, how are do I actually support.
KS: when you say support you mean supporting the mum.
P3: No supporting the perineum.
Many voices: [laughter] supporting the perineum.
KS: so obviously if is painful for the mum as well. I picked up on two things when we mention the word labor, it is the emotional aspect and the actual tasks that you need to do. So it's the actual labor, the episiotomy. Can we explore the two, can we start with the emotional, P2 mentioned that she cried at her first delivery, did anyone else share the same sentiment, can you share the sentiment or feeling of shock?
Many voices: I cried, the baby was so slippery, you scared that you are going to drop the baby, some sisters make you feel so bad, they say cut the umbilical cord no move down, why you cutting so high why you taking so long… you going to kill baby, but you shouting at me does not help does not help at all. at all, but I'm still new to all of us, it is very stressful, it is extremely stressful.
KS: P8 you haven't said much. How was your first experience?
P8: Eish, ok I didn't cry, much.
P8: I was very eager to see like what happens during delivery but when it happened it was an abnormal one, it was a shoulder dystocia, I didn't know what to do I just stood there with my gloves. And it is very difficult because the sisters just look at you, they don't help you. You don't know what to do.
HT: Sorry I was writing I did not hear that.
P8: Sisters expect me to do something but then you I don't know what to do. Say you didn't just come here just to stand there. They say you are in third year.
Many Voices: you in third year, they expect you to know. By the time other students are doing their final year in midwifery we are just starting.
P4: I was just going to say that, so other institutions start their midwifery in second year, whereas we start it in third year. They're doing their last year, and we our first, so they think we are the same as they others, so by the time we are there they have this huge expectation of us, where they say but you are supposed to know how to do this; and you say it's my first time doing this. And they say but what were you doing all this time. But, like what were you doing in second year.
KS: they not aware that Wits students just started.
P4: I think they are.
P5: Some of them are aware. I think they are also some who are not in teaching mode at all. I don't understand you are in a tertiary institution but they are not there to help the students. Don't understand in a tertiary institution and you gonna get students, yet you feel you are not there to help students. If someone teaches you, they are shouting at you.

KS: Do you think emotional aspect… if labor and delivery can be done in simulation, it will it prepare you emotionally in real life, be honest, you may disagree, you can agree.
P2: I don't think it will prepare you emotionally, conditions are quite unpredictable, especially with the first delivery. The first time. It is scary.
P3: It may help because if you competent you will be more confident. It wouldn't be so stressful. The thing is the reality of it they say push baby down, then they say put it up. If you competent then you will know how to put the baby up, it won't be so stressful, you know what they are talking about. But now you are scared you don't know how to put the baby down … on its face, on its bac, how? Especially when it is coming out, you don't know how to catch a baby, Yoh!
HT: whole thing about pushing baby down, so you will want that in simulation in third year, you will encounter that terminology in simulation. What other terminology did you come across? Is it push the baby down or put the baby down?
P1: should I like be applying downward traction of baby, don't really know what to do – need to be very careful – should I be descending the baby by applying pressure. When we did it with Hilary, when one of you guys would be pushing and other will be delivering, so that was very nice to work with then you know this is happening and that is happening. But shooo…the videos do not work. We only did that in September, but I think we should be taught that in January. And not only watch those videos. The videos do not work, not those videos
KS: do you think January of fourth year or can it be done in third year.
Many Voices: Third year.
P2: Before we are expected to deliver, I feel we should have a simulation
KS: that exercise that you did, you think that it can be beneficial?
P2: In third year had intro to women's health for a week and then we did palpations and we did a few other things, then had long break. If we had another whole week for simulation … haven't been in midwifery for five months it is difficult to just go in there and know what to do. If we had another skills week before we get placed. Its May and we started in January. May in third year. They do expect you to know a lot, but when you haven't been in midwifery for five months. It is difficult to just go in there and know what to do.
P6: a skills week before we get placed again, would be really nice, with the whole mama anatomy doll.
HT: Can I just go back to your terminology that you experienced in labor ward that added to your pressure. Is that correct? What other jargon and expressions, like push down, did you take a while to work out.
P7: Support the perineum and hyperflex
KS: Hyperflex? what does that mean, hyperflex?
Many Voices: laughter
P3: You just extend the leg in an extreme kind of way
KS: So did the midwives tell you to do that?
P3: They don't tell you, they expect you to know what and how to do it. Basically they expect us to know everything and when we enter the wards we knew nothing
HT: when in a stressful situation and they shouting out orders to you and you don't know what they're saying, it just heightens things, what must I do, like hyperflex, what must I hyperflex?
KS: I wouldn't know.
Many voices: laughter, the mother? The baby? More laughter

P7: Let me tell you how it took me a while to grasp about the umbilical cord. You tell telling the mum to push, push, push. But once the head is out you need to make her stop pushing and feel for the cord and make sure the cord is not around the neck. But you don't know this and you telling her push you almost there and sister saying no she must not push check for the cord. and we are not taught that in the videos that we watched there is no cord around the neck, everything is just normal and perfect in those videos and this is a tertiary hospital, nothing is normal here
P5: Remember those things those non pharmacological comfort measures you try to do that and the sisters are looking at you strangely at what you are trying to do.
KS: I actually wanted to ask you non pharmacological measures. Do you feel equipped when the mum in labor and pain, to manage?
P2: I don't know after pethidine if you're still in pain.
KS: So what non-pharmacological measures were you taught and what is discouraged in the labor war.
P2: There's riboso
KS: What's riboso?
P2: like change the woman's position like when you take a scarf and place around her belly, while standing behind her. You can't do it.
KS: Did you guys attempt to use the scarf in the ward?
P1: No,
P2: Besides that the patient is always on the bed, especially if it is a complicated birth.
HT: What is it called?
P5: Riboso
P1: The patient is always in can't take them off, can't mobilise, don't know if there is fetal monitoring and we already looked at as bad students because we are Wits students and they feel we know nothing and then we prove them right, it is very embarrassing
KS: Why do they have that assumption of you?
P3: Because we don't work as much as other students.
Many voices: We do, we do
P6: But we only go in for one day in a certain ward, so don't learn the ward routine and if you come back to a ward after three months after only being there once, you forget, you still don't know what is happening. I've only been there for 12 hours three months ago.
HT: that's the plan, that's why we got you here. We want to better equip next year's third years so that when they go into the ward they feel more competent and comfortable in that environment that is why we are asking you. That is why we are asking you what went wrong and from your own suggestions, what can we do to better equip you so that you don't feel useless.
The information so far is very useful. Think about how you can relate it for a two week simulation program where third years would be here for two weeks.
That why we're asking you about the terminology so we can teach the skills so when you go out and get barked out instructions to you, you will know what is meant, with the paper work and everything.
What else do you want?
P4: I think the timing of the simulation program is also quite important. We had the week in January, then we were out, after that had peads, then five months later we are back and just expected to jump back on the horse and get on with it. We are in the wards and it is very difficult when you haven't had a refresher and you are expected just to jump into it.

KS: So you saying it should correlate with your placement.
P4: yes
KS: Your placement should follow that two-week simulation boot camp?
P5: Yes, I was thinking we should have it in every block, because it is skills and we are going to forget it if we are not doing it.
P4: that would be nice, for all skills, but having a boot camp once a block that would be really nice.
KS: Hilary do you want to add anything?
HT: think back to your labor ward is there anything else.
KS: I wanted to ask… simulation yes, it ranges from low fidelity to high fidelity and you talk about episiotomy as a task that you have to do, if you have to cut. Do you think you need more practice with episiotomies, like task training or were you guys ok doing it?
Many voices: no never, I avoid it with everything that I have. I say no, up to this day I still haven't done it
KS: but do you have to have it signed off.
Many voices: Yes, it's the decision of midwife or doctor to cut, cause, we were taught a tear is better or rather a tear is better.
KS: So you can't cut
P1: We can but we are taught that it is better to let the patient tear.
P2: So we really, really, run away from it
KS: So you have not been in a position where you have to actually suture up after.
P1: we can suture, but we call the midwife.
P2: I just feel like it is very intense, because I walked into this one delivery one time and this student, it was a college student … and she was the woman had been pushing about five minutes, and the student said I think I cut an episiotomy and the sister said and on whose patient. You not going to cut an episiotomy on my patient. She [the student] wanted it to get it signed because it's a skill that needed to be signed, so the student was pushing for an episiotomy, when the midwife did not see it fit. So cutting an episiotomy is really dependent on whoever is delivering the patient, the senior who is delivering the patient. Some actually say let's cut but quite a few midwives avoid episiotomies.
HT: Cutting and suturing and episiotomy are they SANC requirements
P1: Suturing.
P3: Cutting is a Wits requirement.
KS: And you guys ok with suturing
P2: I think we were exposed to it only twice, once this year and once last year. I think it would be better if we get more practice.
KS: On suturing?
Many Voices: Yes
Many Voices: Every block we need proper simulation, bot this silicone stuff. The reason it doesn't work because it has been cut a lot.
HT: how did you learn to suture was it silicone or was it meat
Many Voices: silicone… a banana and silicone
HT: How would you like third years to be taught how to suture.
P5: I think silicone. I don't mind the silicone, just that the ones the Department uses, they always have holes.
HT: were you part of the group that we brought in meat – chuck?
Many Voices: No
P2: I think that would be better

HT: then you try and find the apex
Many Voices: Ya! Yes!
P1: When you stand with the silicone thing, you ask now where's the apex and to you everything seems like the membrane
P3: And I think it will be important to be taught how to suture the different layers. We only know to suture with what we got and when we look into the vagina, we don't even know what's going on. Sometimes we like oh, there's no tear, butits there.
HT: let's go back to introduction, just think about simulation and how we can teach the third years. Would you put them straight onto meat?
P4: maybe first the banana in second year, the silicone and then the meat. But I think meat idea is good
The banana thing is fine in second year because you just learning how to hold the needle and how to stitch, but when you need to go and suture someone's vagina you need so much more.
HT: do you think an episiotomy and suturing on meat, and I am not saying this in a judgemental, way, should be in boot camp in first two weeks of their training.
P7: Yes
P6: I did not get the question
HT: Okay we thinking now that they are coming in January, do you think that an episiotomy, suture, should be done in that orientation in the first boot camp. Or do you think that there are more important things that should be done.
P1: I think it can be done later on.
HT: So there are more important things to be done, as I don't think you going to do suturing when you first go to the hospital'
P2: They are not as stressful with the episiotomy because when they ask you have you cut before and if you say no, I haven't learnt. They are okay with that. If they ask have you sutured before and if you say yes, but I'm not that comfortable, they are okay because they know you just came in
P1: One asked me and she said she was holding my hand, but then she moved me out of the way, saying you too slow,
Many voices: Someone else doing an episiotomy felt like the scissors was blunt and you must also wait for a contraction. So it is a skill that you learn with experience so it should be done later in the year.
KS: Can you think of any other skills to introduce to the third years earlier on. We spoke about the PV's, the paperwork, the actual labor, we said episiotomy can be learnt later on because you are not expected to do these right away. Anything else?
P5: another skill that we were taught like **palpations**, we did not have much trouble with this, but it will be good to have it in the beginning. In the ward while the sister is tending to the patient they expect you to do the **palpation,** and tell them the finding of **palpation**, it was taught but it is a skill that needs to be taught early in the third year.
KS: Hilary
HT: Anything else in the labor? Can I ask you about the baby?
P1: [laughs] we forgot about that
HT: Remember the baby for the first two weeks. Anything you would like about the baby put into the simulation program
P2: assessment…of the baby
P3: drying the baby, generally when you catch the baby and covering them up and all of that. Changing the linen, there is a need to go over that as we may just place them in the same wet linen. Small things but you need to know this

KS: that help babies breathe exercise do you think that would be beneficial to be taught in the first boot camp.
P2: Ay, that's fourth year stuff. Because first year is normal delivery and fourth year is abnormal.
P6: helping baby breathe more suitable for later fourth year because you are more mature in fourth year and you have dealt with quite a few and it's easier to identify when baby is in crisis. in third year you are meant to deal with normal deliveries
So easier to do it in fourth year than third year. I think too stressful in third year. I think in third year if I have to help a baby breathe, I will end up crying.
KS: So in third year that expectation is not on
S: When it comes to delivering they expect you to know things, but when it comes to baby they don't put you on the spot because they know the baby's life is more important. They leave you to carry on with the mother, make sure mum is cleaned up, and the delivery of the placenta they will carry on with the baby.
P1: delivery of the placenta
KS: For third year
P2: when I first started the sister asked me what are the signs of **the separation** and I was like mmmm its coming, it's out on a gush of blood. Some people do it differently I know you supposed to do continuous downward traction, but you get some people who do side
Many Voices: They do it differently, some side, left, right.
P4: I even had a sister snap a cord.
P2: I also had that.
P4: She moved, she bumped me out. She said you don't know what you doing she takes over then she snaps the cord.
KS: So it is done different in different institutions, like different hospitals.
P3: Different people
KS: Oh! Different people.
P3: There are guidelines I think that change on how to deliver a placenta. I think you don't do up, down side anymore. But other midwives still use that method so when you say but at school this is what I was taught. They say they weren't taught that, and they ask are you at school. Also transporting the uterus, how to deliver the placenta where do your hands go, because the cord keeps coming and now you're further away then they like just move the one clamp closer. So you can be closer again. It is just knowing small skills like that, that would be helpful.
Many Voices: then you were taught about just using two fingers and they want your whole hand. Then when you use what you were taught just using two fingers. Can't do it with two fingers they ask do you want your fingers to bleed. I have small hands I can't do it with two fingers. I can't do it with two fingers.
KS: what about examination of the actual placenta
P1: We learnt beginning of year that was cool.
KS: That was okay
P3: and we held it, we held the actual placenta and we were able to feel it
KS: And you did it in 3rd year.
Many Voices: yes,
HT: so you feel that was adequate. The placenta, you think that should go into the boot camp, the placenta
Many Voices: yes, the placenta, anything missing, the membranes because that also.
P6: the membranes

HT: the expectancy of how to deliver the placenta, down, round, whatever, how do you think, how should that be taught. How can we better equip you to manage the difference in how to pull on the cord.
P2: I think at school if we are taught the right way, it's just about being confident and say no but sister this is what the guidelines say and this is what I learnt in school, that's why I am choosing to do it this way we can say, Sister this is what I'm comfortable doing.
KS: so there are guidelines on how to do it.
P4: Yes, with the literature as well, that's what we are taught at school it's just a matter of gaining confidence. It is very difficult when you are a fresh 3rd year delivering for the first time to say the literature says… this is what we do, So we just go with what they are doing.
P3: We had that simulation in September and in September, I found out what I was doing was wrong. Only learning it now
HT: Was that in September last year.
Many Voices: Yes.
HT: So that you would like.
Many Voices: Yes
KS: Okay, I want to round off because of time. Is that okay.
Many Voices: Yes
KS: Are there any of you going into midwifery
P1: Don't know, deep down I would love to I would probably go in as an extra shift to moonlight or once in a while.
KS: So why the feeling deep down and not on the surface.
P1: I feel I have been exposed to a lot all of these things that's being mentioned here. In the beginning when I first started it, I really loved it, then how it was taught was all over the place, being taught post-natal, ante-natal, delivery then going back, they were just not coming together. But it's very nice experience, bringing life, helping someone bring life is a very nice experience.
KS: So do you think that if you were better prepared educationally, for lack of a better word, it would have changed your perspective now on going into a midwifery profession.
Many Voices: Yes… exactly. I don't feel confident
P2: I don't feel confident, I delivered over 20 babies although we only expected to deliver 15, I delivered much more, and a lot of them I didn't sign because I am still not confident in delivering babies and it is not something I choose for myself because of that still not being confident
KS: You want to go into it.
P6: Yah, I love to, I love… but the intro part is so complicated and also being exposed to intellectual disability and all of that. You have to know your stuff if you are a midwife. That is the part that scares me what if I do something wrong, what if I don't realize 1, 2, 3 because it comes with everything, understanding the NST, and knowing when something is wrong, the things you have to do immediately, that part is scary
KS: I'm hearing that the litigation part is scaring you
P7: Yes, and it is always emphasized.
KS: That is deterring you?
P5: Yes, that is always emphasized, that litigation
P4: And I mean no one wants to say you deliver a baby today and three years later you learn that because the labor was obstructed and now baby has CP no one wants

to hear that so it wouldn't be nice. You feel I could I have done something different for this baby, did I miss 1,2,3. No
KS: Okay, thanks guys, it was a lot of info and it was so informative. Things were brought up, that I didn't think of. Think you assume things will come up, but you guys went way beyond my expectations so thank you so much. Does anyone want to conclude or comment before we end.
HT: I think just read the research question to them so if there is anything specific that we might have missed
HT: so here it is: The purpose of this research aims to develop a simulation midwifery program to benefit third year undergraduate nursing students with regards to their preparedness for their clinical placement.
HT: Is there anything else? The preparedness.
P5: I just want to go back to suturing, I remember this one time I asked sister if I am supposed to suture and she said no, it's a laceration it will heal on its own. So I am wondering if it would be possible to teach 3rd years how to suture and how to check if you are supposed to suture or not?
P1: Yes, what are you actually looking for
P5: I suppose that will also be a challenge because vaginas are different because sometimes when I go into the mother. I suppose that we will also learn that with time. Like this one mother, was gushing blood Lacerations that we can see in the video that's a light laceration, that's gushing with blood… that can be taught in videos.
P3: That would be nice. Once deliver the placenta the sister is going to ask you well is she intact. And you looking at it and you ahmmm, I don't know, she still bleeding, it just looks red
P1: With experience now I can see it so well,
HT: I hope so
P5: it is just something where you can see this is a laceration and this a light laceration and don't need a suture, and you can inform the sister that. Other times, I don't know. The sister will ask is she intact, … and you…I don't know
KS: so thanks guys help yourself to food and if you need to re-warm there is a microwave here

ANNEXURE 8: INSTITUTIONAL PERMISSION

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

OFFICE OF THE DEPUTY REGISTRAR

10 July 2019

Kerry-ann Singaram
Staff/Student number A0060466/1844807
Master of Science in Nursing
School of Nursing

TO WHOM IT MAY CONCERN

"Identification of third year midwifery skills that could benefit from stimulated practice prior to clinical midwifery placements"

This letter serves to confirm that the above project has received permission to be conducted on University premises, and/or involving staff and/or students of the University as research participants. In undertaking this research, you agree to abide by all University regulations for conducting research on campus and to respect participants' rights to withdraw from participation at any time.

If you are conducting research on certain student cohorts, year groups or courses within specific Schools and within the teaching term, permission must be sought from Heads of School or individual academics.

No research can commence before ethical clearance has been obtained. Kindly forward a copy of the clearance certificate to this office.

Nicoleen Potgieter
University Deputy Registrar

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ANNEXURE 9: PERMISSION FROM HEAD OF FACULTY

Kerry-ann Singaram

From: Hellen Myezwa
Sent: 04 July 2019 06:47 AM
To: Kerry-ann Singaram
Cc: Hilary Thurling; Claire Bracher; Irene Janse Van Noordwyk
Subject: RE: Permission letter for ethics application

Dear Ms Singaram

You have my permission to proceed with your research"Identification of third year midwifery skills that could benefit from simulation practice prior to clinical midwifery placements".

. I wish you well in your endeavours and look forward to the results of your research.

Kind regards

Prof Hellen Myezwa

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School of Therapeutic Sciences
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School of Therapeutic Sciences

WITS UNIVERSITY | THERAPEUTIC Sciences | FACULTY OF HEALTH SCIENCES | 100

From: Kerry-ann Singaram <kerry-ann.singaram@wits.ac.za>
Sent: Wednesday, 03 July 2019 11:26
To: Hellen Myezwa <Hellen.Myezwa@wits.ac.za>
Cc: Hilary Thurling <Hilary.Thurling@wits.ac.za>; Claire Bracher <Claire.Bracher@wits.ac.za>; Irene Janse Van Noordwyk <Irene.JanseVanNoordwyk@wits.ac.za>
Subject: Permission letter for ethics application

For attention: Prof Hellen Myezwa

REQUEST FOR PERMISSION TO CONDUCT RESEARCH IN YOUR SCHOOL

Dear Prof Hellen Myezwa

My name is Kerry-Ann Singaram, and I am a second year Nursing Education Student in the Department of Nursing Education at the University of the Witwatersrand. The research I wish to conduct for my Master's research involves "Identification of third year midwifery skills that could benefit from simulation practice prior to clinical midwifery placements".

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ANNEXURE 10: LETTER FROM RESEARCHER REQUESTING PERMISSION FROM HEAD OF FACULTY OF HEALTH SCIENCES AND HEAD OF NURSING DEPARTMENT TO CONDUCT STUDY

Dear: Professor Myezwa and Maree

My name is Kerry-Ann Singaram, and I am a second year Nursing Education Student in the Department of Nursing Education at the University of the Witwatersrand. The research I wish to conduct for my Master's research involves "Identification of third year midwifery skills that could benefit from simulation practice prior to clinical midwifery placements".

This project will be conducted under the supervision of Doctor Hilary Thurling and Mrs Claire Bracher (University of Witwatersrand, South Africa).

I am hereby seeking your consent to conduct focus group discussions with consenting fourth year nursing undergraduate students as well as their respective midwifery lecturer's and clinical facilitators.

I have provided you with a copy of my research proposal which includes copies of the information letters and consent forms to be used in the research process, as well as a copy of the approval letter which I received form the Post graduate committee.

Upon completion of the study, I undertake to provide the Department of Nursing a bound copy of the full research report.

If you require any further information, please do not hesitate to contact me on:

0837425483

Kerry-ann.singaram@wits.ac.za

Thank you for your time and consideration in this matter

Yours sincerely, Kerry-Ann Singaram

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