EXPLORING REGISTERED NURSES' COMPLIANCE TO STANDARDS FOR MEDICAL MALE CIRCUMCISION

By

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DECLARATION

I, Mamokete Ntsupa, declare that the Masters' Degree dissertation that I herewith submit is for the fulfillment for the Master's Degree qualification at the University of the Free State" titled "Exploring Registered Nurses' Compliance with standards for Medical Male Circumcision" is my work and has not been submitted to any university before. The sources that are used in the study have been acknowledged by means of references. I further cede copy write of these research report in favour of the University of the Free State.

SIGNATURE: *Mntsupa* **.....** **DATE:** **05-FEBRUARY-2021**

M. Ntsupa

DEDICATION

The research is dedicated to the Registered Nurses that are providing Medical Male Circumcision services in Lesotho. I salute you for practicing under such challenging conditions.

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I thank you heavenly father for the strength and courage that you gave me to pursue my studies. For you said, "My grace is sufficient for you and my power is made perfect in weakness" I am humbled and grateful.
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ABSTRACT

Medical Male Circumcision (MMC) is recommended as a Human Immune Virus (HIV) prevention strategy in countries with high HIV prevalence and low MMC prevalence. Lesotho, as the country with the second-highest HIV infection globally, is implementing this strategy. Although MMC services have been accessible to the intended recipients, there is a challenge of poor compliance with WHO standards by Registered Nurses that are providing MMC services in Lesotho. These have been noted during regular quality assessments conducted at MMC sites in Lesotho by supervisors and researcher. The focus group participants had to answer the following research question: *What factors can influence the RNs' compliance with quality standards at the MMC sites in Lesotho?* The purpose of the study is to explore and describe the factors that influence Registered Nurses' compliance with MMC standards.

A qualitative, exploratory, descriptive, and phenomenology research design was used. A purposive sample was utilized. The target population for this study was all the RNs offering MMC services in the five lowlands districts of Lesotho. Explorative interviews were conducted before the main study to determine the questions and pre-empt the problems that might arise in the main study. For the main study, focus group interviews were conducted with 19 registered nurses. The data were analyzed using ATLAS. ti Windows 8 User Manual. The ethical standards regarding the principles of respect for persons, beneficence and justice were adhered throughout the study.

The research revealed three key themes: (1) knowledge of quality standards, (2) barriers to compliance, and (3) perceived enabling working environment. This research highlights that system barriers such as poor infrastructure, insufficient staffing, and inadequate supplies make it difficult for RNs to comply with standards. Furthermore, fatigue and burnout were prevalent among MMC providers due to workload. MMC providers have also stated that carelessness in their work brought on by overconfidence in one's skills often led to poor compliance with quality standards.

This research's main conclusions show that high workloads and limited resources contribute to poor compliance with quality standards. The studies revealed that a well-established quality improvement framework increases accountability and prevents the risk of intentional errors. It also enhances systems that reduce the recurrence of similar mistakes. Furthermore, the study and literature findings demonstrate that it is possible to address the quality of MMC using a Continuous Quality Improvement (CQI) approach, supportive supervision, and feedback. Key recommendations are as follows: managers should establish programs for continuous professional development and evaluate their clinical practice impact. Performance-based incentives should be linked to appraisals for better quality services, and the strengthening of accountability is recommended. Healthcare institutions should establish and sustain human resources that will meet the population's needs to provide quality services. Managers must be held accountable for the provision of quality health care. Registered nurses should take an active role in quality improvement activities in a healthcare setting and align nursing practice with professional values.

Keywords: Compliance, quality, standards, Medical Male Circumcision, Registered Nurse, HIV

ABBREVIATIONS AND ACRONYMS USED IN THE STUDY

AIDS	Acquired Immune Deficiency Syndrome
ART	Anti- Retroviral Therapy
CHAL	Christian Health Association of Lesotho
CQI	Continuous Quality Improvement
EQA	External Quality Assessment
GoL	Government of Lesotho
HIV	Human Immunodeficiency Virus
HESREC	Health Sciences Research Ethics Committee
ICN	International Council of Nurses
LNC	Lesotho Nursing Council
LDHS	Lesotho Demographic and Health Survey
LECSA	Lesotho Evangelical Church Southern Africa
LePHIA	Lesotho Population-based HIV Impact Assessment
MMC	Medical Male Circumcision
MoH	Ministry of Health
PEP	Post Exposure Prophylaxis
PEPFAR	Presidential Emergency Plan for AIDS Relief programme
PDSA	Plan Do Study Act
PMTCT	Prevention of Mother to Child Transmission
PrEP	Pre-Exposure Prophylaxis
RN	Registered Nurse
RSA	Republic of South Africa
UFS	University of the Free State
UNAIDS	Joint United Nations Program on HIV and AIDS
UNICEF	United Nations Children Fund
WHO	World Health Organization
QI	Quality Improvement

CLARIFICATION AND OPERATIONALISATION OF CONCEPTS

Exploring

To explore is to examine something thoroughly to test or learn more about it (The Oxford Advance Learner's Dictionary, 2010:406). *In this study, exploring mean identifying the factors hindering compliance with quality standards intending to support the registered nurses to provide MMC services.*

Registered Nurse

The International Council of Nurses (ICN) (2012:2) describes a registered nurse (RN) as a health professional who initiates and supports appropriate actions to meet the public's health and social needs. In Lesotho, this is a person who has been trained in nursing and midwifery for a period of four years at a recognized institution and who has subsequently acquired professional registration with the Lesotho Nursing Council (LNC) in order to practice as an RN (LNC, 1998:32). *In this study, RNs are those nurses who meet the criteria described above and have been trained in terms of the World Health Organization's (WHO) standards in providing Medical Male Circumcision (MMC) services.*

Compliance

Botha, Rossin, Geach, Goodall, and du Preez (2016:63) refer to compliance as implementing practice according to the requirements of clearly defined rules and standards. At the same time, compliance is defined in Macmillan Dictionary Online (2020:n.p.) as showing a willingness to implement practice according to set standards. Furthermore, Efstathiou, Papastavrou, Raftopoulos & Merkouris (2011:2) define compliance as an extend to which certain behaviour is influenced by a variety of

factors. *For this study, compliance means the ability of RNs to provide MMC services according to the World Health Organization (WHO) defined standard to enhance the safety and quality of the MMC service.*

Standards

Macmillan Dictionary Online (2020:n.p.) defines a standard as a written definition of service that is approved or accepted. At the same time, Muller (2009:258) defines standards as written descriptions of how the expected level of work should be performed in order to judge the quality of such work. Standards can further be defined as approved statements for implementing a particular phenomenon against which measurement can be made, which may serve as a comparison (Booyens, 2015:262). *In this study, standards are the adopted WHO statements of MMC services delivery, which guide the implementation of safe and quality MMC services by RNs in Lesotho.*

Medical Male Circumcision

Medical male circumcision is described as the permanent and complete surgical removal of the skin that covers the head of the penis (Marieb & Hoehn, 2016:1050). *In this study, MMC refers to the surgical removal of the prepuce by medical officers and trained RNs.*

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CHAPTER ONE

Overview of the study

1.1 INTRODUCTION, BACKDGROUND AND RATIONALE

Medical Male Circumcision (MMC) is an Human Immunodeficiency Virus (HIV) preventive strategy recommended by the World Health Organization (WHO) and the Joint United Nations Programme on HIV/AIDS (UNAIDS) (WHO, 2018:2). There are other preventive strategies, such as proper and consistent use of condoms, prevention of mother-to-child transmission (PMTCT), as well as pre-exposure prophylaxis (PrEP) and post-exposure prophylaxis (PEP), which have been implemented in preventing the spread of HIV. Occurrences of new HIV infections (incidence) declined from approximately 3.4 million to 1.8 million globally during the 1996-2017 period with these approaches in place (UNAIDS, 2018:6). Despite the global decline in new infections, there are still concerns that the progress on the reduction of new HIV transmissions is much slower, possibly reaching the target of less than 500 000 new infections by 2020 (UNAIDS, 2018:6). Therefore, it is essential to check whether Medical Male Circumcision standards are adhered to in the interest of reducing HIV incidence.

Medical Male Circumcision is one of effective strategy proven in reducing the contraction of HIV among heterosexual men by approximately 60% (WHO, 2018:2). It is perhaps essential to highlight that HIV "remains a significant cause of morbidity and mortality in sub-Saharan Africa", with Lesotho having the second-highest HIV prevalence (number of people infected) globally at 25% (Central Intelligence Agency, 2019). Despite the recognised burden of HIV among women, majority of men die due to HIV and AIDS so targeting men with HIV and AIDS prevention activities is essential in achieving an AIDS-free generation (UNAIDS, 2018:14). Lesotho has a high HIV prevalence and low uptake of MMC (Ministry of Health [Lesotho] and ICF International, 2016:191). The Lesotho Ministry of Health (MoH) adopted an MMC strategy for HIV prevention in 2012, with support from the Presidential Emergency Plan for AIDS Relief (PEPFAR) (Government of Lesotho, 2012:2).

The effectiveness of MMC as an HIV prevention strategy in countries with low circumcision rates and high HIV prevalence relies on the 80% MMC coverage that is required to have an impact at the population level (Omondi-Aduda, Ouma, Onyango, Onyango & Bertrand, 2015:02). The researcher deduces that MMC services in Lesotho should be accessible to high numbers of boys and men to reach the required coverage that will inhibit the spread of HIV. The MMC service uptake relies on the MMC services being accessible, efficient, and deemed safe for the intended clients (Hankins, Forsythe & Njeuhmeli, 2011:02).

In rendering safe and efficient MMC services in Lesotho, the WHO's standards were adopted. According to the WHO (2018:64), the recommended standards range from establishing an effective management system for male circumcision services to having a plan for monitoring and evaluation. These standards are explained in Chapter 2.

Although these standards should be adhered to, some of the WHO recommended standards are beyond the individual capacity of registered nurses providing MMC services in Lesotho. For example, the availability of medicines, supplies, and equipment ensures that trained RNs are declared competent before rendering services are beyond the registered nurse's capacity. It is, therefore, necessary to explore the factors that can increase compliance with quality standards aimed at supporting the RNs to provide MMC services. For example, the study that was done by Sgaier, Reed, Thomas & Njeuhmeli (2014:5) demonstrates that physical and emotional exhaustion by staff providing MMC services may be associated with non-compliance to quality standards. The study that was done by Sgaier *et al.* (2014) in Zimbabwe also relates fatigue to non-compliance, and it would be necessary to explore these issues in Lesotho.

In Lesotho, MMC services are rendered at six MMC sites. These sites are located within the existing health care facilities at Motebang, Berea, Queen Elizabeth II, Scott, Mafeteng, and Mohale's Hoek. The partnership between the Lesotho MoH and PEPFAR has enabled boys and men to access these MMC services. Initially, when the WHO announced MMC as a strategy for HIV prevention, medical officers or physicians primarily rendered the services with the assistance of RNs. However, due to the significant demand for the services, other health care professionals had to step in and undergo training to offer these services so that the demand for MMC services could be met.

Lesotho is among the 14 countries in sub-Saharan Africa that has been identified as a Medical Male Circumcision priority country. Due to its limited human resources for health, the policy on task sharing for MMC had to be implemented. The WHO recommends that in scaling up the MMC services, countries should train non-physician providers to perform this procedure comprehensively.

Currently, the MMC services in Lesotho are mainly rendered by trained RNs. This means that this population of healthcare practitioners is tasked with the responsibility of ensuring that these services are safe and of high quality. Although MMC services have been accessible to their intended recipients, there is a challenge of poor compliance with the WHO standards described above. These have been noted during regular quality assessments conducted at MMC sites in Lesotho by supervisors and the donor. In addition, the programme reviews, such as the annual Lesotho External Quality Assessment (EQA) carried out by PEPFAR and an independent mid-term review of the MMC programme in Lesotho from 2016 to 2019 indicated that there are gaps in RNs' compliance with quality standards at MMC sites. Examples of gaps that are often seen include the following: assessment of the clients and their vital signs are not taken, documentation of follow-up care is not done, infection prevention is not adhered to, and the inappropriate use of surgical methods of the circumcision takes place, which results in glans injuries.

This pattern of poor compliance prompted an intervention, and various measures have been effected. These include on-going (refresher) training and support provided to the RNs rendering MMC services at MMC sites in Lesotho. The researcher, who is the master trainer and quality assurance officer, conducts supervision visits to these MMC sites regularly. Reports of these visits are compiled and communicated to various key role-players, including the implementing RNs. Meetings are also held with these stakeholders to remedy the situation. A research study conducted by Oosthuizen and Van Deventer (2010:1) indicate that compliance with accepted quality standards of care is fundamental in improving healthcare, because poor compliance will not only result in expensive litigation, will be accompanied by complications for the client.

Despite all of these measures to address poor compliance with quality standards, the RNs are still not fully complying with these standards. Clients are circumcised without a physical examination, vital signs are not taken, the prescribed surgical method is not followed and there is poor documentation of follow-up care, some are operated without informed consent.

Male circumcision is a relatively simple and safe procedure, however, serious adverse events such as glans injury and bleeding can occur when MMC services do not adhere to quality standards (WHO, 2018:64). The RNs' persistent poor compliance to quality standards attracted the researcher's attention and prompted an exploration into the situation.

1.2 PROBLEM STATEMENT

The researcher often meets with the RNs rendering the MMC services on general supervision and training platforms. During these platforms, it was discovered that the RNs rendering MMC services at the six sites in Lesotho are not complying with specific quality standards as recommended by the WHO. Poor compliance with standards has resulted in some clients experiencing infections, bleeding, and glans injuries to mention a few. Omissions in obtaining proper consent and has resulted in lawsuits. The poor adherence could result in poor client satisfaction, which could negatively influence the uptake of MMC services and as a result, new HIV infections will continue

to rise. The RNs' persistent poor compliance to quality standards attracted the researcher's attention and prompted an exploration into the situation.

The study conducted in Cyprus by Efstathiou *et al.,* 2011:2 found that compliance with measures aimed at preventing infection was low among RNs. Studies conducted in the African region have shown that compliance with quality standards among MMC providers is low (Jennings *et al.,* 2014:2; Byabagambi *et al.,* 2015:2; Lunsford, Byabagambi, Falconer-Stout & Karamagi, 2017:42). There is scarcity of information in Lesotho that focuses on MMC quality standards compliance. Therefore, it is difficult to impose corrective measures until the real reasons for poor compliance have been established. The remedies such as training and mentoring of RNs delivering MMCs may continue to be offered with no desired results if the core of the problem is not identified and addressed. Therefore, the study aimed to explore why adherence to some of the quality standards is low. Poor compliance with quality standards threatens the safety of men and boys undergoing MMC.

1.3 RESEARCH OBJECTIVES

- To explore and describe the factors that influence RNs compliance with quality standards at MMC sites in Lesotho.

- To describe recommendations to facilitate compliance with quality standards at MMC sites in Lesotho

1.4. RESEARCH QUESTION

The following research question that emerged after reviewing the problem:

> *What factors can influence RNs' compliance with quality standards at the MMC sites in Lesotho?*

1.5 RESEARCH PURPOSE

The purpose of this study is to explore and describe the factors that are likely to influence RNs compliance with quality standards at MMC sites in Lesotho. Based on

the results, to implement strategies for addressing identified problems as recommended.

1.6 SIGNIFICANCE OF THE STUDY

From the exploration and description of the RNs' poor compliance with quality standards at MMC sites in Lesotho, recommendations will be formulated to facilitate compliance with these quality standards. These recommendations will be described in terms of health policy, nursing practice and education, as well as future research. The researcher views this study as an important strategy to improve the safety and quality of MMC services being rendered to boys and men in Lesotho. With compliance to quality standards and the consequent MMC services that are safe and of quality, the researcher believes that the uptake of MMC services in Lesotho will be aligned to the need for this service and prevent the spread of HIV. The research findings could be published and presented at research conferences to enable the global community to learn lessons or benchmark from this study.

1.7 PARADIGMATIC PERSPECTIVES

A paradigm is a worldview that indicates a way of thinking and making sense of the real world's complexities (Bahramnezhad, Shiri, Asgari & Afshar, 2015:19, Patton, 2015:89). Furthermore, Botma, Greeff, Mulaudzi and Wright (2010:40) state that paradigms are based on philosophical assumptions that give meaning and quality to research. It is a qualitative research practice to explain the philosophy used, as it will influence the study methodology and the study design.

This study followed a social constructivism paradigm within the interpretivism tradition (Patton, 2015:89). It seeks to understand the RNs' perspectives of their social realities and how they interact with their environment, which may influence their compliance with quality standards. Of particular importance, here is a person's scientific beliefs, namely ontology, epistemology, methodology, and axiology. Ontology is relative and deals with the nature of realities. Reality is socially constructed and is subjective, as people experience reality in different ways. RNs' poor compliance with standards was described based on their way of feeling, thinking, and seeing as they provided services. Epistemology is transactional, and the meanings and reality of poor compliance with quality standards are socially constructed when RNs interact with one another. The paradigm is discussed in more detail in Chapter 3.

1.8 RESEARCH METHODOLOGY

Research methodology is the plan that is used to determine how data will be collected and analyzed to answer the research question (Polit & Beck, 2017:463). The researcher selected qualitative, exploratory, and descriptive research designs to answer the research question. Qualitative studies seek to understand the meaning and experiences of the phenomenon under investigation (Brink, Van der Walt & Van Rensburg, 2012:120). Botma *et al*. (2010:182) state that a qualitative approach is used when little is known about the subject of interest. Therefore, an exploratory design was used to do an in-depth exploration of the phenomenon. The research design is discussed in Chapter 3.

1.9 RESEARCH APPROACH

The research approach refers to the researcher's procedures to obtain information from the subjects (Grove, Burns & Gray, 2015:264). Interviews are considered the primary method of acquiring data in qualitative studies (De Vos, Strydom, Fouche & Delport, 2014:367; Polit & Beck, 2017:506). In this study, focus group interviews were used to obtain information from RNs. Focus group interviews are techniques in which a group of individuals are assembled to discuss a selected topic, regarding complex their experiences, beliefs, perceptions, and attitudes through a facilitated interaction (Savin-Baden & Major, 2013:375). Focus group interviews generated knowledge regarding the factors that influence RNs' compliance with quality standards at MMC sites in Lesotho. The details of focus group interviews and the study sits are discussed in chapter three.

1.10 POPULATION

Population refers to a large pool of all elements that meet the inclusion criteria from which the sampling is drawn in answering the research question (Grove *et al.,* 2015:82). The population for this study was all the RNs offering MMC services. The programme started in Lesotho in 2012, and to date, 389 RNs have been trained. Nonetheless, not all these Registered Nurses are actively involved in MMC service provision. The study population were drawn from the five lowlands districts of Lesotho. The study sites are described in details in chapter three.

1.11 UNITS OF ANALYSIS

Unit of analysis refers to the individual study participants from which information may be generated (Polit & Beck (2017:747). In this study, the RNs working at MMC sites in Lesotho were considered information-rich informants for contributing to factors that may influence compliance.

1.11.1 Sampling and sample

Sampling involves choosing all elements to participate in a study, while a sample represents the selected participants included in a study (Grove *et al.,* 2015:270). Purposive sampling was used to determine a representative group of participants from all six MMC sites. Registered nurses who were purposefully selected were believed to be knowledgeable about the topic under study. They had more than one year of service and were also trained on numerous occasions on quality standards.

1.11.2 The inclusion Criteria

- RNs should have been rendering MMC services for a period of one year and more.
- Registered nurses should be providing MMC in the lowlands districts of Lesotho

1.11.3 The exclusion criteria

- All Registered nurses that have less than one year providing MMC services
- Registered nurses that are not willing to participate
- Registered nurses providing MMC in the highlands district of Lesotho

1.11.3 Recruitment

The registered nurses were recruited when they attended their quarterly meetings. The researcher introduced the research topic and identified potential participants. Twenty-five RNs met the inclusion criteria, and all who showed interest, based on the inclusion criteria, were invited to participate. However, only 19 RNs participated in the study. In preventing the coercion issue, the participants were informed that there would be no financial benefit for participating in the study. Participants were given transport reimbursement, and there were no consequences for those who opted not to participate. Registered nurses were given an information leaflet to read on their own to make an informed decision about participating in the study, so participation was voluntary. The dates of the focus group interviews were shared with participants, and each participant chose a suitable date. The number of focus group interviews was determined by data saturation, as stated in De Vos *et al.* (2014:367). The focus group facilitator was recruited because the researcher, as the quality improvement officer

who oversees compliance with quality standards at the MMC sites in Lesotho, the researcher was not in a position to conduct the focus group interviews.

A focus group facilitator and a co-facilitator well versed in conducting focus groups were recruited to facilitate the sessions. The facilitator has a Ph.D. in Social Sciences, while the co-facilitator has a Master's degree in Nursing. The co-facilitator's role was to handle logistics, such as operating the audio-tape, observing non-verbal cues and group dynamics, and document the general content of the discussion

1.12 EXPLORATORY INTERVIEW

Exploratory interviews were conducted. An explorative interview is a small-scale version of the main study (Grove *et al*., 2015:45). The explorative interviews were used to assess the study's feasibility and the focus group questions and to identify problems pertaining to data collection (Botma *et al.,* 2010:29). The focus group questions were tested on five RNs from the private clinics that are providing MMC prevention. The purpose was to pre-empt problems that may arise in the main study and to check for understanding of the questions. Their responses yielded good results; however, they do not form part of this study.

1.13 DATA COLLECTION

Data collection is defined as a precise process or a systematic method of obtaining information relevant to the research objectives (Grove *et al.,* 2015:47). Before data collection, the procedures about ethical requirements were followed. The focus group interviews were recorded using an audio recorder, with permission from the participants. This provided the researcher (who was not part of the focus group interviews) with an accurate verbatim account of the conversations, as well as an extensive record of interactions taking place during the focus group interviews. The focus group interviews took place on a weekend when the RNs were not on duty. These interviews could not be conducted during working hours due to work commitments. The number of participants per focus group interviews ranged from four to six, and four focus groups were conducted.

1.14 DATA ANALYSIS

In qualitative studies, data analysis involves transcribing the interviews in order to create meaning from the results (Polit & Beck, 2017:530; Brink *et al*., 2012:177). Sharan and Tisdell (2016:202) describe data analysis as a process of organizing and preparing data to develop meaning from it. Data analysis coincides with data collection in qualitative studies (Polit & Beck, 2017:530). Audio-recorded interviews and observations during data collection are the primary sources of data (Polit & Beck, 2017:530).

The recorded interviews were first transcribed and organized to provide answers to the research question. Qualitative data analysis involves reducing raw data volume, sifting, and identifying significant patterns to have a manageable data set (Polit & Beck, 2017:530). This allows for themes and patterns to be identified, making it easier for data to be analyzed and interpreted (De Vos *et al*., 2014:397).Data analysis was mainly done using ATLAS.ti qualitative data software to promote an efficient means for storing and locating qualitative data (Botma *et al*., 2010:227; Creswell & Creswell, 2018:268). The researcher went through each line of text and assigned codes. This process is regarded as faster and more efficient than hand-coding (Creswell & Creswell, 2018:268).

1.15 MEASURES TO ENSURE TRUSTWORTHINES

Trustworthiness is defined by Brink *et al.* (2012:141) as the process through which the researcher ensures the truthfulness of the study by deploying different strategies to ensure rigor. Trustworthiness was ensured using Lincoln and Guba's model, as cited by Polit and Beck (2017:559). This model describes trustworthiness as the *"truth value"* of the study's findings, or how accurately the researcher interprets the participants' perspectives about the phenomenon that is being explored. The criteria to ensure trustworthiness include credibility, transferability, dependability, confirmability and authenticity.

1.15.1 Credibility

In qualitative studies, credibility means the true value of the study, in other words, the truthfulness of the results about the phenomenon under study, and the confidence that can be placed in data collection and analysis processes (Brink *et al.,* 2012:172). Strategies to ensure credibility, as discussed in Botma *et al*. (2010:233), include prolonged engagement, observation, member checking, triangulation, and peer debriefing. In this study, the findings' credibility was enhanced through prolonged engagement, persistent observation, and triangulation (Brink *et al.,* 2012:172).

The researcher achieved prolonged engagement by investing sufficient time to re-listen to the audiotapes and read the transcripts several times to gain an accurate understanding of the information. The researcher also jotted down the ideas as they came. The recruited facilitator invested enough time with the participants during the focus group interviews to understand the factors that influence compliance with quality standards. A good rapport was built with the participants so that they felt comfortable to share their views. Triangulation makes use of multiple strategies and different data sources such as observational notes to obtain information. Feedback about the interviews was sought from the participants at the conclusion of the focus group.

1.15.2 Transferability

The extent to which findings can be transferred or generalized to other contexts or other participants is called transferability (Polit & Beck, 2017:560). Brink *et al.* (2012:173) state that strategies to enhance transferability are thick description, purposive sampling, and data saturation. In ensuring the transferability of the data, purposive sampling was used to select participants who were knowledgeable about the topic. The researcher gives a thick description of the study design, the method used to collect data, and how data was analyzed.

1.15.3 Dependability

Dependability refers to consistency of data if the study were to be repeated in a similar context with the same participants (Brink *et al.,* 2012:172; Polit & Beck, 2017:559). The researcher provides a detailed description of the methods and procedures used for data collection in such a way that other researchers can attempt to collect and analyze data in a similar way. The supervisor examined the research process to ensure that the findings were consistent.

1.15.4 Confirmability

Confirmability refers to the degree to which general findings are supported by the data. It is the neutrality, relevance, and meaning of data (Polit & Beck, 2017:560). Confirmability may be ensured by an audit trail, triangulation of literature resources, and a consensus discussion between the researcher and the supervisor. Verification is available from the researcher on request. The details are described in chapter three.

1.15.5 Authenticity

Authenticity refers to the extent to which the researcher can indicate a range of realities as they are described by the participants (Botma *et al.,* 2010:234; Polit & Beck, 2017:560). In this study, authenticity was achieved by reporting information from the participants in such a way that any pre-conceived ideas of the researcher did not influence it.

1.16 ETHICAL CONSIDERATIONS

Approval to conduct the study was be obtained from the HSREC of the Faculty of Health Sciences of the University of the Free State (UFS) and the MoH of Lesotho. Botma *et al.* (2010:04) state that ethics must be integrated throughout the research process. There are three basic principles for researchers involving human participants (Brink *et al.,* 2012:35). These are the principle of respect for persons, the principle of beneficence, and the principle of justice.

1.16.1 The principle of respect for persons

This principle has three components (Brink *et al.,* 2012:35), namely respect for participants' rights to self-determination, their right to privacy, and their right to autonomy and confidentiality. Self-determination is concerned with allowing people to ask questions, refuse to give information, and withdraw from the study without prejudicial treatment (De Vos *et al.,* 2014:119). The right to self-determination was ensured by informing participants that participation in the study was voluntary, that they could choose whether to participate or not and that they could discontinue their participation at any time without any consequences.

The principle of voluntary participation is formalized through the concept of informed consent (De Vos *et al.,* 2014:118). Furthermore, Brink *et al.* (2012:38) state that informed consent has three elements that provide further guidance. The consent was explicit regarding the information that is required from the study participants. it clearly stated that participants have a choice to withdraw from the study at any time. Lastly, participants have to be given time to comprehend the information before consent can take place. In this study, participants were given all the necessary information before the interviews. Participants were informed that they had the right to withdraw from the study at any time without consequences. Written consent was obtained from participants after providing them with all the necessary information. Permission from the participants to record the conversations was also requested. The right to full disclosure entails the researcher describing the study in full, so that the participants understand the purpose of the research and what is expected of them. The right to privacy and confidentiality means keeping participants' information where unauthorized persons cannot have access. The anonymity and confidentiality of the participants should be guaranteed (Botma *et al.,* 2010:19). The participants were informed that the information discussed would be kept confidential. In complying with confidentiality, neither the institution nor the participants were referred to by name. Computer-based files were encrypted, while paper-based records are kept secure and accessible to the study personnel only.

1.16.2 The principle of beneficence and non-maleficence

This principle entails the right to secure the participants' wellbeing by protecting them from unnecessary harm and discomfort (Brink *et al.,* 2012:36; De Vos *et al.,* 2014:115; Grove *et al.,* 2015:174). To adhere to this principle, the researcher chose not to facilitate the focus group interviews herself, as she is the quality improvement officer. The facilitator adhered to the time that the interview was scheduled to take place, to prevent discomfort. The participants were monitored throughout the discussion for any signs of distress.

1.16.3 The principle of justice

This principle entails the fair selection and treatment of participants (Brink *et al.,* 2012:36). In this study, all registered nurses providing MMC services had a chance to be selected, based on the inclusion criteria. This principle was adhered to by purposely selecting RNs who have been providing MMC services for more than one year because they are considered to be knowledgeable about the topic. Light refreshments were served after the interviews, and the transport costs of the participants were reimbursed.

1.17 OVERVIEW OF THE STUDY CHAPTERS

This study consists of five chapters, structured as follows:

Chapter 1: Provides an overview of the study and presents the statement of the problem, research purpose, and questions. It also presents the scope and significance of the study.

Chapter 2: Outlines the review of the literature in the context of where the study takes place, what is known around MMC, and the factors that may influence compliance with standards.

Chapter 3: Focuses on the methodological approaches of the study. It presents the ethics, research design, and setting, as well as the sampling procedures. It then focuses on data collection methods and data analysis with ATLAS ti software.

Chapter 4: Presents the description, presentation, and interpretation of the findings. This is done based on the findings of the factors that influence RNs' compliance with MMC standards.

Chapter 5: Presents the discussion and conclusion. Here the findings are discussed to answer the research questions. This chapter also outlines the main findings, presents recommendations, makes suggestions for future studies and ends with the conclusion.

1.18 CONCLUSION

This chapter gives the orientation of the study. It presented the research problem, questions, and purpose. The research design and methods used were identified, and an explanation of the ethical principles that were adhered to during the process of the study was stated. The subsequent chapter presents a review of the relevant literature.

CHAPTER 2

Overview of literature

2.1 INTRODUCTION

A literature review is a process of searching relevant information about the topic under study. It includes appraising the data and synthesizing the findings of other relevant studies (Grove *et al. ,*2015:163). In order to identify factors that are likely to influence compliance to quality standards in MMC sites in Lesotho, an overview of the literature was done before commencing with the study, during the research process, and after data collection. An overview of literature serves to identify essential aspects in the provision of quality MMC services in the context of HIV prevention. At the end of this chapter, a critical understanding of key issues regarding compliance to MMC standards will be shared.

2.2 SELECTING AND REVIEWING LITERATURE

Literature sources were collected by searching several electronic databases. Databases used included the University of the Free State's Library, PubMed, CINAHL, Science Direct, and Google Scholar. Keywords used included quality, quality of care, compliance, safety, standards, and Medical Male Circumcision. The information about compliance with quality standards was limited to articles and books published between 2009 and September 2020.

2.3 OUTLINE OF LITERATURE REVIEW

The literature review will be discussed under the following headings:

- HIV infection
- Medical Male Circumcision and quality standards
- Background of quality of healthcare
- Barriers to compliance with quality standards
- Quality improvement
- Quality improvement framework
- Conclusion

2.4 HUMAN IMMUNODEFICIENCY VIRUS INFECTION BACK-GROUND

The HIV attacks the body's immune system, especially the CD4 cells. It destroys CD4 cells, weakening a person's immunity against other infections such as tuberculosis and some cancers (Hinkle & Cheever, 2014:2120). UNAIDS (2019) states that approximately 76 million people have been infected with HIV, and about 33 million people have died of HIV/AIDS, since the epidemic started. More than 38 million people in the whole world were living with HIV at the end of 2018 (UNAIDS, 2019).

Although the epidemic continues to burden countries, there is however, considerable differences between countries and regions, the African region remains the most severely affected, with nearly one in every 25 adults (3.7%) living with HIV, accounting for more than two-thirds of the people living with HIV worldwide (UNAIDS, 2019). Among this group, 20.6 million live in East and Southern Africa, where 800,000 new HIV infections occurred in 2018. However, the number of HIV-related deaths have declined by more than 55% since the peak of 1.7 million in 2004 and 1.4 million in 2010 (UNAIDS, 2019). Lesotho is among the countries experiencing high numbers of HIV (UNAIDS, 2019).

It is estimated that 306,000 people were living with HIV in Lesotho in n 2018, and AIDS-related illnesses accounted to 6,100 death out of the population of about 2.2 million (Lesotho Population-based HIV Impact Assessment (LePHIA), 2019:44). There

is decline in HIV incidence in Lesotho, as there were 23,000 new infections in 2005 and in 2018 there were13,000 new infections compared to 21,000 decline that was expected in 2018. In Lesotho, heterosexual intercourse is the main mode of HIV transmission, as it accounted for 80% of new infections in 2014 (Coburn, Okano & Blower, 2013:3; LePHIA, 2019:14). Therefore, there is still a need to engage other strategies such as MMC to prevent HIV transmission.

Lesotho is classified as a lower-middle-income country, and 57% of Lesotho's population lives below the poverty line (Ministry of Health [Lesotho] and ICF international, 2016:165). High levels of poverty are deemed to slow response to the HIV epidemic. Many people are financially vulnerable and engage in risky behavior such as sex in exchange for gifts or money to survive (Ministry of Health [Lesotho] and ICF international, 2014:196). Although progress has been made in some areas, issues like stigma, people who engage in casual sex, and gender-based violence remain.

Despite the higher HIV burden among women, men account for most HIV and AIDS-related deaths (UNAIDS, 2018:14). Reaching men with HIV and AIDS prevention activities is, therefore, critical in achieving an AIDS-free generation. A combination of prevention strategies such as condoms and MMC is therefore necessary.

2.5 MEDICAL MALE CIRCUMCISION AND QUALITY STANDARDS

Medical Male Circumcision (MMC) is the surgical removal of the skin that covers the head of the penis (Marieb & Hoehn, 2016:1050). This procedure is conducted under general or local anesthesia and is offered at healthcare facilities by medical officers, clinical officers, and trained registered nurses. Medical Male Circumcision is typically performed to address medical problems such as phimosis and paraphimosis, prevent HIV infection, and promote hygiene (WHO, 2018:12).

In this study, MMC refers to the surgical removal of prepuce under local anesthesia by medical officers and trained registered nurses for boys from the age of 15 years and men in Lesotho. According to WHO (2018:2) clients should have access this procedure voluntarily as part of HIV preventive strategy. *"HIV weakens the body's*

immune system by targeting cells CD4 receptors, including Langerhans cells" (WHO, 2018:2). *"These cells are present in high density in the epithelium of the inner foreskin and are close to the surface"* (WHO, 2018:2). Therefore, by removing the foreskin, the risk of HIV infection is considered to be reduced. Data from randomized control trials in South Africa, Kenya, and Uganda show that MMC can reduce the risk of HIV acquisition among men and boys by approximately 60% (Auvert, Taljaard, Rech, Lissouba, Singh, Bouscaillou, Peytavin, Mahiane, Sitta, Puren & Lewis, 2013:10).

The WHO and UNAIDS recommended that countries with a high HIV prevalence should adopt Male Medical Circumcision as an additional strategy to prevent HIV. The Lesotho Ministry of Health adopted the provision of facility-based MMC to reduce HIV infections in 2012. It is important to discuss the significance of MMC in preventing new HIV infections to consider that the procedure needs to be of a high quality and should be safe to attract the intended beneficiaries. In 2008, the WHO developed a quality assessment toolkit to assess a range of quality standards from infection prevention, management systems, etc. The quality standard toolkit is essential to guide MMC service provision and for simplifying supervision and quality assurance tasks.

The WHO (2018:2) developed a toolkit, specifically to help staff in evaluating the quality of their services. The WHO (2018:2) further recommends that facility and programme managers may use the toolkit to improve services. This toolkit includes has a checklist that assesses performance standards (WHO 2018:2). Assessing MMC service quality helps to assure the provision of safe services that reduce the occurrence of adverse events and protect clients and providers (WHO, 2018:71).

The WHO (2018:66) define an adverse event as any harm, injury or undesired outcome that may result due procedure (WHO, 2018:66). A serious adverse event is associated with any medical treatment that results in death, or life-threatening, which requires inpatient hospitalization or continuation of existing hospitalization, or results in persistent or significant disability or incapacity requiring intervention to prevent permanent impairment damage (WHO, 2018:66).

In the context of male circumcision, serious adverse events are related to bleeding, infection, or injury of the penis. In an attempt to standardize MMC services while

preventing adverse events, the WHO recommends the service standards as highlighted in Table 2.1.

TABLE 2.1: The WHO Recommended Medical Male Circumcision Standards service standards

1. An effective management system is established to oversee the provision of male circumcision services.
2. A minimum package of medical male circumcision service is provided.
3. The facility has the necessary supplies, medicine, equipment and environment for providing safe medical male circumcision services of good quality.
4. Providers are qualified and competent.
5. Clients are provided with information and education on HIV prevention and medical male circumcision.
6. Assessment are performed to determine clients' condition.
7. Medical male circumcision surgical care is delivered according to evidence based guidelines.
8. Infection prevention and control measures are practices.
9. Continuity of care is provided.
10. A system for monitoring and evaluation is established

Source: WHO (2018:64)

These standards describe the expected treatment and its quality. Providers should provide the service using the same standards and methods and follow the same protocols. Countries providing MMC should adopt this set of quality standards for service delivery to be safe and effective. However, there is poor compliance with these quality standards at MMC sites in Lesotho. Poor compliance with quality standards has been persistent and was found in a number of assessments conducted both internally and through independent audits.

Remedial measures to assure compliance have been implemented but may not be useful when the real reasons for poor compliance have not yet been established. Poor compliance could result in poor client satisfaction, which could negatively affect the uptake of MMC services. It is important to ensure that the MMC service package is offered according to the World Health Organization's set standards to achieve the desired public health impact (Jennings, Bertrand, Rech, Harvey, Hatzold, Samkange, Omondi-Aduda, Fimbo, Cherutich, Perry, Castor & Njeuhmeli, 2014:1).

2.5.1 Typical client flow through male circumcision services

There are specific steps to follow when offering MMC services. This maximizes the efficiency and effectiveness of the service. Steps as prescribed by WHO are shown in Figure 2.1 (WHO, 2018:10). This includes education about MMC HIV risk reduction and other aspects of reproductive and sexual health (WHO, 2018:10). Information is also given about the circumcision procedure, both as an independent topic and even as part of a comprehensive HIV prevention strategy (WHO, 2018:10). This is done to facilitate client autonomy in order to obtain informed consent. The next step is screening to determine client eligibility, followed by the circumcision procedure, immediate post-procedure care, including wound care instructions and then follow-up at 48-72 hours, seven days and again at six weeks (WHO, 2018:10).

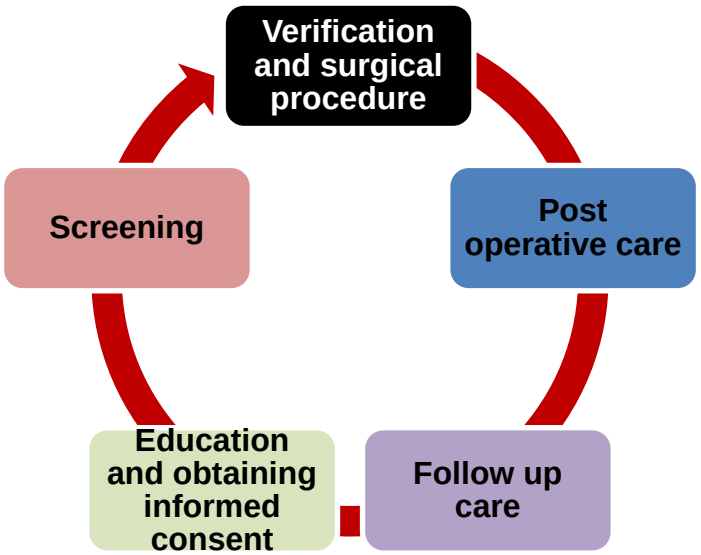


FIGURE 2.1: Steps in the flow of clients at MMC Site (WHO, 2018:10)

2.6 BACKGROUND OF QUALITY IN HEALTHCARE

The Ministry of Health governs the healthcare system In Lesotho. The Ministry is responsible for overseeing the health of the nation. Like many lower-income countries in sub-Saharan Africa, Lesotho faces a number of deficiencies in delivering quality and safe healthcare (Ministry of Health, 2016). Substandard care results in adverse events, injury to patients, prolonged hospital stay and lawsuits. The WHO emphasizes a need

for cost-effective and safe healthcare for all to achieve better patient outcomes (Oosthuizen & Van Deventer, 2010:1). The study conducted by Permana and Hidaya (2018:240) confirms that health services are required to provide care that meets the set standards to be able to improve patient safety. The study further indicates that infrastructure, material resources, and human resources are associated with poor compliance with quality standards. However, in MMC service provision, a rapid scale-up has been identified as one of the causes of poor compliance with quality standards (Byabagambi, Marks, Megere, Karamagi, Byakika, Opio, Calnan & Njeuhmeli, 2015:2).

Some of the gaps in service provision identified during external quality assessments seemed to be caused by a deviation from standards. It is worth exploring the factors that are likely to cause these gaps. In a study done by Perry, Rech, Mavhu, Frade, Machaku, Onyango, Omondi-Aduda, Fimbo, Cherutich, Castor, Njeuhmeli and Bertrand (2014:1; also, Oosthuizen & Van Deventer, 2010:1), burnout and emotional exhaustion were mentioned by providers as reasons for poor compliance. In contrast, the study conducted by Jennings *et al.* (2014:1) in Kenya, South Africa, Tanzania and Zimbabwe demonstrates that it is possible to provide quality services during rapid scale-up. Furthermore, Byabagambi *et al.* (2015:2) believe that scaling up MMC services at the same time as providing quality services is possible where there is strong quality assurance. Public health interventions need to be well established before scaling up services to achieve the desired impact. However, there are many barriers in service provision that prevent services from meeting the desired standard.

2.7 BARRIERS TO COMPLIANCE

Compliance is defined as a willingness to obey what is required of the law (Botha *et al.,* 2016:63). Compliance with standards in healthcare settings is described as providing care that is free from preventable harm and avoidable adverse events (Efstathiou *et al.,* 2011:2). To be compliant, all set standards and legislative requirements must be met. For this study, compliance means the ability of registered nurses (RNs) to provide MMC according to WHO-defined standards to enhance the safety of the MMC service to minimize the risks associated with it. Studies have shown

that compliance with quality standards among MMC providers across the African region is low (Jennings *et al.,* 2014:2; Byabagambi *et al.,* 2015:2; Lunsford, Byabagambi, Falconer-Stout & Karamagi, 2017:42). Compliance was found to be low in the areas of infection prevention and control, obtaining informed consent, low follow-up post-surgery, etc. While it is critical for MMC services to be compliant with set standards, it is worth reviewing the barriers to compliance.

A variety of factors can influence compliance with standards. Research suggests that cultural, economic, and social factors and a lack of knowledge can influence compliance to standards (Efstathiou *et al.,* 2011:2). Several common barriers to compliance have been identified as ineffective systems, lack of systematic quality evaluation, insufficient staffing, and organizational factors such as poor leadership (Izumi, 2013:1; Oosthuizen & Van Deventer, 2010:1). Individuals' work dissatisfaction and burnout, a lack of teamwork, poor communication among team members and competing priorities were identified as barriers to compliance (Sgaier *et al.,* 2014:2; Shah, Castro-Sanchez, Charani, Drumright & Holmes*,* 2015:127).

The subject of compliance with quality standards in the MMC programme is of particular importance due to its effectiveness in HIV prevention (Lunsford *et al.,* 2017:39). Although many factors have been associated with poor compliance with quality standards, human behavior seems to emerge in a number of studies (Cassam, 2017:1; Permana & Hidaya, 2018:241). Countries that are scaling up MMC are required to comply with WHO set standards so that the intervention is safe for men and boys (Sgaier *et al.,* 2014:2 & Byabagambi *et al.,* 2016:2). Poor compliance with quality standards threatens the safety of men and boys undergoing MMC, the success of the MMC programme and ultimately its ability to reduce HIV as a public health crisis in Lesotho. Ensuring safe and efficient MMC service provision is essential to reduce new HIV infections. Robust quality improvement activities as well as good care of providers to prevent burnout need to be put in place to facilitate compliance with quality standards.

2.8 QUALITY IMPROVEMENT

Quality improvement (QI) should be of relevance to everyone involved in healthcare, including patients, healthcare professionals, and families, to make changes that will lead to the delivery of quality healthcare (Booyens, 2015:255). Furthermore, Muller (2009:257) defines quality improvement as a formal process of setting standards and monitoring performance against the set standards. Despite decades of focusing on improvement and client safety, the evidence shows that scant progress has been made in this regard (Andrew & Valeras, 2019:352).

The low rate of quality improvement progress is associated with inefficient healthcare systems, poor systematic evaluation, and insufficient staffing, as alluded to by Efstathiou *et al*. (2011,2; Permana & Hidaya, 2018:240; Megeus, Nilsson, Erikkson, Karlsson & Andersson, 2015:4). Therefore, healthcare institutions should focus on the continuous development of systems that will enable staff to deliver quality care. In order to ensure the safe and efficient execution of MMC procedures, it is essential to improve the quality of services continuously. Once quality improvement is in place, it has to be monitored closely, stressing the importance of continuous quality improvement (Izumi, 2013:2). Research conducted in Uganda suggests the implementation of QI methodology in order to address challenges with compliance to quality standards in MMC (Byabagambi *et al.,* 2015:2).

Several common quality gaps were identified in Lesotho MMC services, including inadequate screening of clients, poor documentation of follow-up care, poor adherence to infection prevention, and the inappropriate use of surgical methods. The mentioned risks and the causative factors may remain consistent, regardless of the severity of outcomes, if robust interventions are not implemented. Although gaps that are found in MMC are classified according to their severity and the potential effects on the clients, it is important to sensitize MMC providers to the outcomes of their errors to prevent future occurrences.

Reporting and mitigation strategies targeting adverse events and errors should focus on systems and processes rather than on individuals, in alignment with quality

improvement principles. Quality improvement is based on principles that increase productivity, reduce costs, and render health services more appealing (Izumi, 2013:2). The quality improvement model is focused on developing tools and protocols that are intended to bring a solution to the complex health system (Booyens, 2015:251). Its tools outline processes used for analysis and planning. According to Booyens, (2015:251) the tools has the sequence of steps or a set of activities for identifying problems and redundant or unnecessary steps in the flow of the service. This helps to determine areas for monitoring (Andrew & Valeras, 2019:352). The most pronounced problem should be addressed first in realizing the impact of the intervention.

The Lesotho MMC programme adopted the QI approach to improving MMC service quality and safety following the gaps that were continuously found in implementation. Improvement was observed from the baseline to the subsequent assessment when the model was introduced. However, the improvement was not sustained because few people were trained on this approach, as the training was funded by external partners. It is important that all healthcare providers involved in this type of approach should be trained to be able to facilitate active participation.

The study conducted by Jennings *et al.* (2014:4) demonstrated that quality improvement teams could critically identify and continuously eliminate gaps in care. The researcher believes that improving and sustaining quality in Lesotho MMC sites do not only mean the application of methodologies but will require expanding the knowledge and skills of the service providers so that quality becomes their culture. The desired improvement will require commitment from the management and RNs to facilitate compliance with quality standards at MMC sites. Flodgren, Gonçalves-Bradley and Pomey (2016:6) state that commitment will be demonstrated by teams carrying out self-assessment and periodic audits to inspect performance and provide feedback. Achieving sustained QI requires a clear quality improvement framework to improve the way in which care is delivered to patients.

2.9 QUALITY IMPROVEMENT FRAMEWORK

The quality improvement framework emerged from the theories of W. Edward Deming (Haughom, 2019:1). The framework is centered on the fact that improvement of quality is scientific and practical. The process focuses on planning and delivering healthcare to ensure quality and safety and improve patient outcomes. In addition, processes have characteristics that can be measured, analyzed, improved, and controlled (Booyens, 2015:251).

A well-established quality improvement framework increases accountability and prevents the risk of intentional errors. It also enhances systems that reduce the recurrence of similar mistakes (Booyens, 2015:256). Evidence has shown that errors committed in MMC service provision may be avoided with compliance to quality standards (Jennings *et al.,* 2014:4). Conversely, clinicians may ignore this important aspect of service provision to their own detriment in the absence of clinical accountability and governance.

In MMC service provision, it has been demonstrated that adherence to relevant policies, treatment of sexually transmitted infections, and active post-procedure care improve service delivery (WHO, 2018:70). Therefore, medical Male Circumcision providers should commit to safe and quality services to reduce adverse events and protect themselves and their clients. The framework emphasizes that the provision of quality healthcare services can only take place under strong leadership and clinical governance.

2.9.1 Leadership for quality

Leadership is the foundation of quality improvement in any healthcare institution (Andrew & Valeras, 2019:352). Influential leaders support and foster a culture of quality improvement among healthcare workers to cultivate pride in the services they provide (Booyens, 2015:250). Furthermore, the development of administrative and clinical policies and procedures is critical to guide staff in carrying out their duties. Staff training, provision of resources, and infrastructure establishment are crucial to

enhance commitment in a culture of quality improvement (Oosthuizen & Van Deventer, 2010:1). Megeus *et al.* (2015:6) reason that strong clinical governance and leadership are the core drivers of continuous quality improvement across all aspects of healthcare operations. Therefore, comprehensive leaders should structure systems that deliver health services that respond to clients' needs and effectively engage staff. The first quality standard in the WHO MMC quality standard toolkit is an effective management system for overseeing the provision of male circumcision services (WHO, 2008:45). The standard creates an enabling environment for staff, patients, and communities to work together for better health outcomes. Leaders' involvement in quality improvement has demonstrated motivation for providers to comply with set standards (Byabagambi *et al.,* 2015:2). Improvement of compliance with quality standards, therefore, requires the involvement of both leaders and clinicians.

In 2012, the Lesotho Ministry of Health (MoH) developed a policy and implementation strategy to guide the implementation of male circumcision in the country. The strategy provides guidelines aimed at increasing the safety and quality of male circumcision in the country. However, MoH leadership at the district level has been less involved in MMC implementation, resulting in poor integration of MMC services into primary healthcare services. The poor leadership has resulted in frustration and dissatisfaction from the side of the partners supporting the program, as well as RNs involved in service provision. Research has shown that a combination of clinical governance and motivated staff may create an environment that accelerates quality improvement (Lunsford *et al.,* 2017:39).

2.9.2 Clinical governance for quality

Clinical governance is defined as a process through which organizations drive quality improvement across all aspects of operation (Booyens, 2015:250). Quality improvement does not come automatically. It requires planning and the implementation of quality improvement principles and should clearly identify the priority of universal health coverage (WHO, 2018:17). With the above fundamentals in place, it is possible to implement quality improvement interventions and sustained them. Clinical governance has been recognized as a driving force in any health system

to provide services that meet the expected and reasonable performance level. Good clinical governance creates an enabling environment for research and learning and the use of information technology to advance healthcare. Sgaier *et al*. (2014:2) acknowledge that all levels of management within the health sector are required for compliance with quality standards. Although clinical governance plays a major role in driving QI activities, independent organizations that focus on quality improvement in the healthcare setting have assisted in strengthening systems in some institutions (Byabagambi *et al.,* 2015:2; Jennings *et al.,* 2014:2; Lunsford *et al.*, 2017:40).

Lesotho adopted the same approach with the MMC programme. Improvement towards compliance with quality standards was observed while there was support from the independent organization. However, the improvement was not sustained when the independent organization retracted its support. The effectiveness of clinical governance may also be determined by the ability to integrate independent organizations with healthcare workers so that there is a transfer of learning for sustainability.

Compliance with quality standards requires good clinical governance and the active participation of healthcare workers. The commitment of RNs to the delivery of quality MMC services that comply with standards is crucial, as the expansion of programmes is linked to quality improvement activities.

2.9.3 Staff engagement in the delivery of quality services

The engagement of healthcare workers in organizational systems that are aimed at quality improvement may increase the likelihood of a culture of quality improvement (Megeus *et al.,* 2015:2). Staff feel valued and acknowledged for their contribution to quality improvement. Registered nurses are obliged by law to provide quality services that adhere to quality standards (Muller, 2009:251). However, support and guidance are required from clinical leadership to enable them to practice with accountability. The technical skills that RNs require need to be augmented with communication skills in order for them to function effectively in a team of healthcare professionals in delivering quality services. Jennings *et al.* (2014:2) suggest that the provision of knowledge and

involvement of providers in the quality improvement process increase compliance with quality standards. It has been observed in countries that are providing MMC, such as Lesotho, that a rapid scale-up of MMC without additional staff puts a lot of pressure on the RNs, resulting in a negative impact on overall quality service provision (Sgaier *et al.* 2014:2). Similarly, many clients are served during winter months and school holidays, resulting in burnout and work fatigue during those periods (Perry *et al.,* 2014:5).

In addition, a shortage of nursing personnel at healthcare facilities and the setting of unrealistic MMC targets limits RNs' ability to address clients' needs and predisposes them to fatigue, which might increase the occurrence of adverse events. Adverse events are believed to be compounded by fatigue and burnout (Oosthuizen & Van Deventer, 2010:1). Leaders and clinical managers need to provide resources that may reduce these errors. While it may appear that quality services benefit clients only, RNs and managers cultivate pride in providing quality services with minimal complications. Registered nurses have to understand the importance of compliance to standards and national guidelines and should aim for accuracy when delivering healthcare services at all times (Oosthuizen & Van Deventer, 2010:1; Sgaier *et al.,* 2014:2). For the successful implementation of quality services, there is a need to engage patients and their families in the process of care.

2.9.4 People-centred healthcare

People-centered healthcare is the process of involving patients and their families in their own care to ensure commitment for better health outcomes (Booyens, 2015:263). It goes beyond individual care at the health facility but starts with planning the healthcare appropriate for an individual and a community. The central goal in healthcare must be the value for patients, as health systems cannot function without clients. In MMC programmes, client-centredness is enhanced by the provision of information through relevant structures at the community level. Upon arrival at the facility, informed consent is obtained as a way of ensuring that the principle of autonomy is adhered to (Grove *et al.,* 2015:113).

The involvement of MMC clients in the delivery of care reduces the risk of adverse events. Sgaier *et al.* (2014:6) state that information that is tailored to different age groups and according to the community's cultural norms has a significant impact on influencing people's decisions about health services. The support and guidance provided by RNs and the active dedication of patients and their families may contribute to compliance with quality standards and improve clients' safety. It is the responsibility of healthcare workers to empower patients by providing them with information regarding health issues so that they can make informed decisions. Healthcare workers may be knowledgeable about health-related issues, but without patients' involvement as beneficiaries, their work is in vain. Informed clients who have more control over their health conditions, e.g., when to return for follow-ups or refill their medication, make the work easier for all involved in patient care.

The use of a suggestion box and client exit interviews build a culture of learning regarding patients' experiences at health facilities so that the healthcare workers can respond accordingly (Flodgren *et al.,* 2016:6). Patients and their families' technological developments have enabled patients to manage health issues without necessarily having to go to a facility. This transition has contributed to the quality of care and the quality of life as well. The good relationship between staff and patients creates an enabling environment for quality improvement. When all aspects of quality are in place, everybody contributes, and everybody gains.

2.9.5 Use of improvement methods

According to Andrew and Valeras, (2019:352), teams may use quality improvement methods in closing the gap between the desired standard and the actual performance (Andrew & Valeras, 2019:352). Once the team reaches a consensus regarding solutions they wish to implement, a quality improvement plan may be developed (Andrew & Valeras, 2019:352). This plan should be reviewed at each team meeting to ensure that it is being implemented as intended. Various quality improvement models have been developed. Although the basic approach remains the same, most acceptable QI models have their origins from the theories of W. Edwards Deming (Booyens, 2015:252). These QI models promote small-scale rapid-cycle change over

short periods. Improving quality care and sustaining it requires the implementation of the theory of change, based on the application of the improvement cycle. The monitoring of quality improvement, with the acronym Plan DO Act cycle (PDSA), was introduced by Deming to measure change until there is an improvement (Booyens, 2015:254). The cycle is depicted in Figure 2.2.

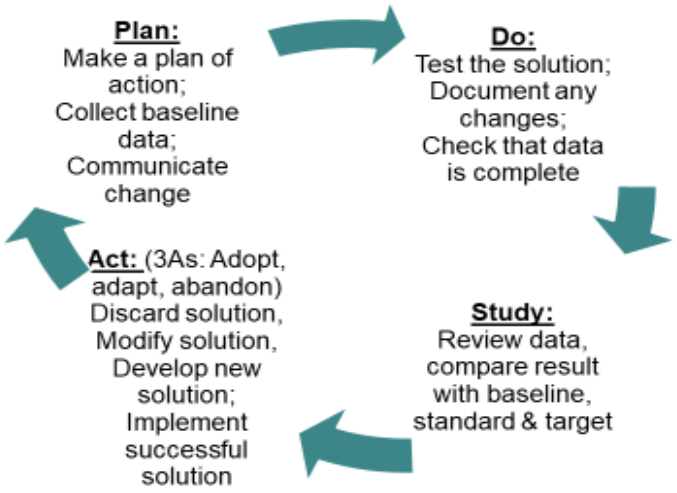


FIGURE 2.2: The PDSA Cycle (www.phf.org)

The first step is the "*planning"* stage, where objectives are set. Staff seeks to improve and ask themselves how they are going to carry out activities using who, what, where, and when. The second step is the "*doing*" stage, where the plan will be implemented, problems are documented, and unexpected observations begin. Data is also analyzed. The third stage is the "*study"* stage, where the collected data has been analyzed and is compared with what was predicted. The lessons learned are summarised. The last step is the "*action"* stage, where best practices are sustained, changes that did not yield improvement are redesigned while some are discarded, and then the best practice is shared with other clinicians and practices. Using relevant tools, conclusions are drawn. If new or other gaps are identified, the above steps are repeated again.

The steps show the importance of testing any changes for improvement and carrying out the implementation of proven solutions. Staff involved in QI processes should not be discouraged, even if an implemented change is minimal. Quality improvement is a

continuous process, so it should be measured to assess the progress made towards change.

2.9.6 Measurement for quality

Quality of care is continually monitored and measured to assess if improvements lead to changes in compliance to set standards (Flodgren *et al*., 2016:5). The first measurement of actual performance allows the identification of gaps in performance, so that improvement plans can be developed. Furthermore, measurement allows us to quantify standards achieved in percentages to ease comparison. In the spirit of transparency, information obtained from measurements must be shared with all relevant stakeholders, including patients, providers, and policymakers (WHO, 2018:18).

Effective clinical governance may drive the ongoing implementation of measurements conducted either internally or by an independent provider. Information obtained from measurements should be used to transform practice through research and learning. In MMC service provision, teams are supposed to conduct independent site-level assessments to periodically measure and monitor progress. The process facilitates the ownership of quality improvement and therefore improves results. Furthermore, the use of tools that generate dashboards to measure and monitor compliance to standards has made it easy for RNs to compare performance and instilled a desire to display improved functionality with follow-up assessments (Byabagambi *et al.,* 2015:02). The same strategy has worked for the Lesotho MMC programme. Insufficient commitment from both managers and providers has, however, resulted in an inconsistency in the measurement of compliance to quality standards.

Feedback plays a significant role in identifying any unjustified deviations and in increasing compliance. Byabagambi *et al.* (2015:02) assert that providing ongoing feedback has demonstrated an improvement in compliance with Uganda standards. The measurement of compliance against set standards has the potential to improve compliance to standards and reduce the likelihood of errors in the provision of care.

2.10 CONCLUSION

The study of relevant literature revealed that compliance with quality standards is a complex phenomenon. It involves the attitudes of healthcare workers, the availability of resources, the knowledge of healthcare workers, and the culture of those providing the service and leadership in service provision. Healthcare workers should take into consideration that while there are barriers to quality service provision, there are also benefits to those who receive quality services and even to the service providers themselves.

The literature overview stresses the need to have quality improvement strategies that are monitored and measured for their effectiveness. Clinical leadership should create an enabling environment for research and learning to take place through the quality improvement process. Training of everyone involved in the care of patients should be prioritized to expand knowledge and skills. The provision of guidelines and standard operating procedures is key to enhance the provision of quality services. The specific setting and the practice aspects where the services are offered have to be conducive to facilitate compliance to standards.

Adverse events that occur in male circumcision service provision may be minimized if services are compliant with standards. Addressing attitudes and behavior, enhancing professional commitment and effective clinical governance, may also enhance compliance with standards. Furthermore, leaders are also obliged to provide the necessary resources to enable healthcare workers to comply with quality standards. The next chapter will discuss the methods that were used to collect data.

CHAPTER 3

Research methodology

3.1 INTRODUCTION

The review of literature relevant to the study was outlined in Chapter 2. In this chapter, a description of the study's research design, the study population, sampling techniques, and the data collection strategy are discussed. The discussion includes data analysis techniques, issues of measurement quality and ethical considerations, and a chapter summary. The research context is also outlined to provide an overview of healthcare in Lesotho and the location of the study sites.

3.2 RESEARCH CONTEXT

Lesotho is a small country in Southern Africa, landlocked by the Republic of South Africa (RSA). It has a population of about 2.2 million inhabitants (Partners in Health, 2020; United Nations Children's Fund (UNICEF), 2017). The country's topography presents difficult terrain, with highlands and mountains cover three-quarters of the country and the Lowlands, Foothills and Senqu River Valley covering the remaining quarter (Ministry of Health [Lesotho] and ICF international, 2014). This limits the provision of high-quality healthcare, as many of Lesotho's inhabitants live in remote villages that are hours away from healthcare facilities (Partners in Health, 2020).

Health services in Lesotho are decentralized into three health levels. The primary level comprises village networks of over 5,000 volunteer community healthcare workers. The secondary level comprises clinics/healthcare centres, while the tertiary level is made up of teams operating from referral hospitals (Christian Health Association of Lesotho (CHAL), 2020; Government of Lesotho, 2018). Figure 3.1 presents maps of Lesotho's ecological zones and health centres. According to United Nations Children's Fund (UNICEF) (2017), there are four ecological zones, namely the Foothills, Lowlands, Mountains, and the Senqu River Valley.

It also shows Lesotho's ten districts, with blue clusters representing urban locations and red indicating rural healthcare centres.

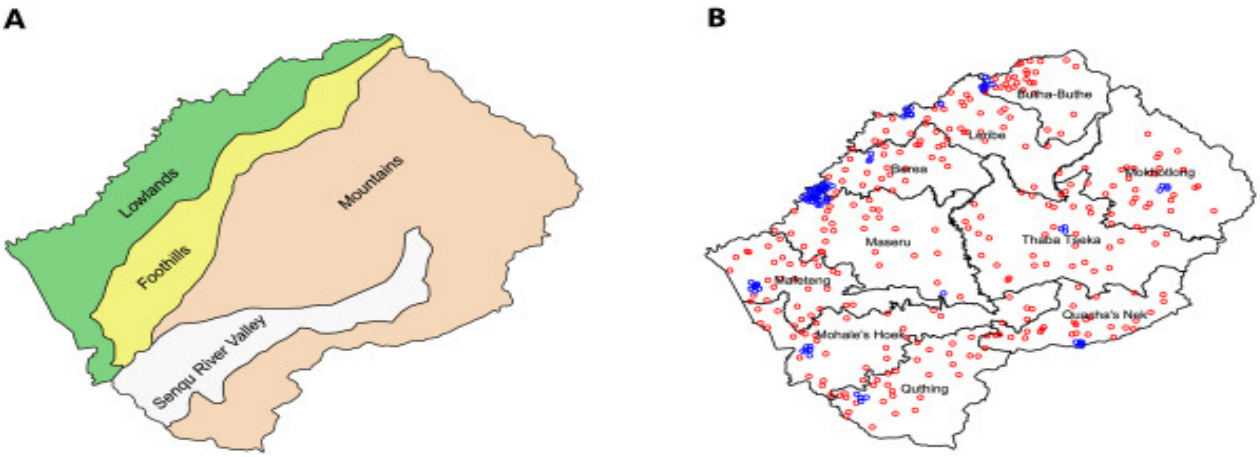


FIGURE 3.1: Maps of Lesotho's Ecological Zones and Health Centres: (Coburn, Okano & Blower 2013)

A report by the United Nations Children Fund (2017:17) indicates that Lesotho has 286 healthcare facilities. Out of these, 265 are primary healthcare centres, 18 are general district hospitals, and one is a tertiary/referral hospital in Maseru. There are also two private hospitals in Maseru and Berea districts. The Government of Lesotho (GoL) is the main healthcare provider in Lesotho and operates 110 primary healthcare centres and nine general hospitals. The Christian Health Association of Lesotho operates 61 healthcare centres and eight general hospitals, while Tšepong operates the tertiary care hospital and four clinics (UNICEF, 2017:8), as presented in Figure 3.2. It is imperative to take note that the healthcare services offered by private hospitals and CHAL will differ in quality and variety, based on the sources of funding.

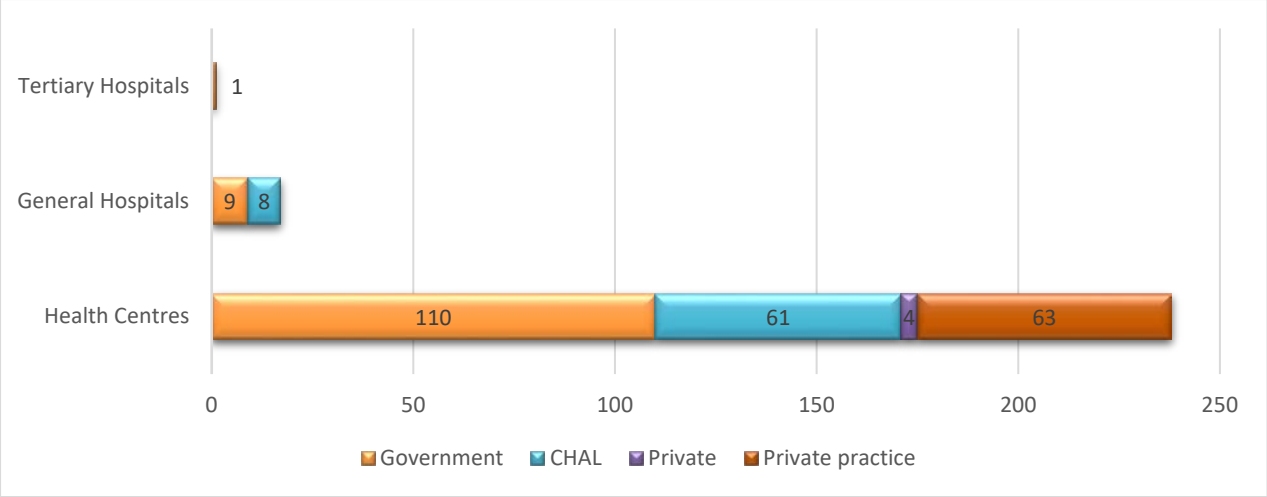


FIGURE 3.2: Healthcare Facilities by Provider (UNICEF, 2017:18)

The nine government hospitals in Lesotho are the Botha-Bothe, Berea, Machabeng, Mafeteng, Mokhotlong, Motebang, Ntšekhe Quthing, and Makoanyane hospitals, while those run by CHAL include Maluti, 'Mamohau, Paray, Scott, Seboche, St. Joseph, St. James and Tebellong hospitals (UNICEF, 2017:19) as shown in Figure 3.3.

This network of hospitals, clinics, and healthcare centres provides basic facilities throughout most of Lesotho, with the Ministry of Health (MoH) maintaining a comprehensive, coordinated and integrated healthcare system in conjunction with various non-governmental and private agencies. The WHO also plays a key role in directing, coordinating, and supporting a wide spectrum of health-related activities in Lesotho (Government of Lesotho, 2018). However, for this study, the target population and sites were drawn from the Lowlands region of Lesotho, where MMC services are offered daily.

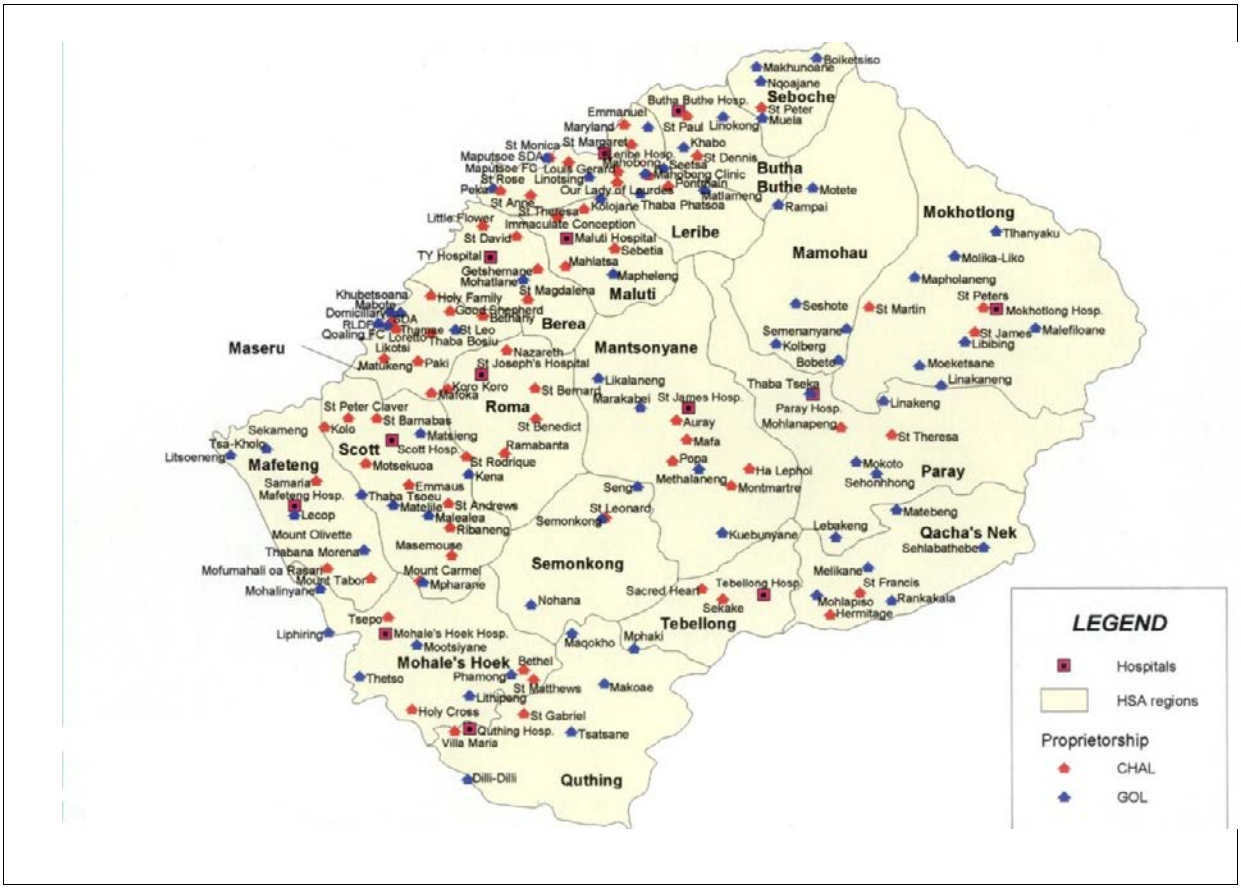


FIGURE 3.3: Distribution of healthcare centers in Lesotho (CHAL, 2020)

3.2.1 Study sites

Registered Nurses from facilities in the Lowlands region formed part of the study. In this regard, six sites in five districts where MMC services are routinely provided were identified. These study sites are described in the next section.

3.2.1.1 Queen Elizabeth II Government Hospital

The Queen Elizabeth II Government Hospital was established in 1957 and named after Queen Elizabeth II of England (Reinikka, 2011). In 2002, the Queen Elizabeth II Hospital had the highest estimated catchment population of 304 355. It also had the highest representation of 126 RNs, 59 doctors, seven staff nurses, and 86 nurse assistants (Bureau of Statistics, 2002:3). Although demolished in 2020 to make way for a bigger hospital anticipated to serve over 400,000 people (Motsoeli, 2020), the

Queen Elizabeth II Hospital was the main healthcare centre in Maseru city for many years.

3.2.1.2 Scott Hospital

The Scott Hospital is Lesotho Evangelical Church in Southern Africa' (LECSA) institution administered by CHAL (LECSA, 2016). It was founded nearly 80 years ago, with major funding from its benefactor, Mr. William Scott (LECSA, 2016). The Scott Hospital is located at Morija, approximately 40 kilometers south of Maseru. In 2002, the Scott Hospital served around 198 988 people. It had four doctors, 29 RNs, nine staff nurses, and 38 nurse assistants (Bureau of Statistics, 2002:3). The Scott Hospital holds the prestigious title of being the hospital where the current monarch of Lesotho, King Letsie III, was born.

3.2.1.3 Mafeteng Government Hospital

The Mafeteng Government Hospital is situated in the Mafeteng district, approximately 77 kilometers south of Maseru. Mafeteng Hospital strives to meet clients' healthcare needs, and in 2015, it had a 148-bed capacity (UNICEF, 2017:19). The hospital serves approximately 181,755 people in the district. It has eight doctors, 37 RNs, and 24 nurse assistants (Bureau of Statistics, 2002:3).

3.2.1.4 Ntšekhe Government Hospital

The Ntšekhe Government Hospital is located in Mohale's Hoek district, about 125 kilometers south of Maseru. In 2015, the Ntšekhe Hospital had a 148-bed capacity (UNICEF, 2017:19). It is the only hospital in the district. In 2002 the Ntšekhe Hospital served about 160,292 people, and it had five doctors, 28 RNs, one staff nurse, and 34 nurse assistants (Bureau of Statistics, 2002:3). However, by 2009 the number of people served by the hospital had increased to 173,781 people from 14 community councils in Mohale's Hoek. Fourteen healthcare centers are working in collaboration with the hospital (Mohale's Hoek District Council, 2009:15).

3.2.1.5 Berea Government Hospital

The Berea Government Hospital is located about 40 kilometers north-east of Maseru. In 2002, the Berea hospital had a catchment population of 157,534, served by eight doctors, 33 RNs, two staff nurses, and 30 nurse assistants (Bureau of Statistics, 2002:3). In 2015, it had a 128-bed capacity (UNICEF, 2017:19).

3.2.1.6 Motebang Government Hospital

This government-run hospital is located in the Leribe district, approximately 95 kilometers north-east of Maseru. It serves a population of roughly 233,221. Clients are served by five doctors, 44 RNs, one staff nurse, and 37 nurse assistants. In 2015 the Motebang Hospital had a 192-bed capacity (UNICEF, 2017:19). It also services 28 healthcare centers located throughout the Leribe district.

3.3 RESEARCH PARADIGM

A paradigm is a worldview that influences a person's way of thinking and making sense of the complexities of the world (Bahramnezhad *et al.,* 2015:19, Patton, 2015:89). In social research, paradigms reflect researchers' perspectives based on a set of shared assumptions, concepts, values, and practices (Johnson & Christensen, 2012:31). Paradigms are based on the researcher's philosophical views of the world that give meaning and quality to the research (Botma *et al.*, 2010:40). Given that this study seeks to explore and describe the factors influencing RNs' compliance with quality standards at MMC sites in Lesotho, the researcher needed to select a research paradigm that is chiefly contextual in order to elicit a deep understanding of the research problem (Botma *et al*., 2010:43). It is in this regard that this study adopted a constructivist/interpretivism worldview. The researcher believes that reality (ontology) is subjective, mental, personal, and constructed, while knowledge (epistemology) is relative, depending on the individual's understanding and justification (Patton, 2015:89; De Vos *et al.,* 2014:309; Johnson & Christensen, 2012:31).

On the one hand, constructivism believes that individuals seek an understanding of the world they live and work (Creswell & Creswell, 2018:46). Therefore, focus group interviews were used to obtain the views of RNs regarding the complexity of offering MMC services on a large scale. The different views allowed the researcher to search for a plausible truth. Furthermore, the reality is viewed as socially constructed and is subjective, as people experience reality in different ways (De Vos *et al.,* 2014:309).

On the other hand, interpretivism emphasizes an understanding of the meaning that individuals ascribe to their actions (Patton, 2015:89). This approach seeks to understand the RNs' perceptions of their social realities, as well as how they interact in their environment, as this may influence their compliance with quality standards. This implies that the researcher accepts that the social situation influences the experiences of RNs in the way they provide MMC services. The constructivist/interpretivism paradigm underscores the notion that people construct their own understanding and knowledge of the world by experiencing and reflecting on those experiences (Adom, Yeboah & Ankrah, 2016:2).

The paradigm used is based on four philosophical assumptions, namely ontology, epistemology, methodology, and axiology (Botma *et al*., 2010:40). Firstly, ontology is relative and deals with the nature of reality (Patton, 2015:89). The researcher's ontological approach focuses on embracing possible multiple and complex realities that may influence the research participants' behavior regarding compliance to standards. Consequently, RNs' compliance with standards is described based on their way of feeling, thinking, and seeing things. The information obtained from participants also contributes to generating knowledge on how to improve practice so that recommendations could be made for future programme design.

Secondly, epistemological assumptions are based on the nature of knowledge and understanding (Patton, 2015:85). In conducting focus group interviews, the researcher attempted to capture the participants' knowledge regarding quality standards.

Thirdly, methodology deals with how valid knowledge can be acquired. It focuses on the various methods or strategies employed to obtain knowledge (De Vos *et al*., 2014:359; Botma *et al.,* 2010:41). In this regard, the researcher utilized qualitative focus group interviews to investigate the factors that influence RNs' compliance with MMC quality standards.

Lastly, axiology refers to the ethical issues that need to be considered when planning a research proposal (Kivunja & Kuyini, 2017:28). Simply put, it considers the question *"What is the nature of ethics or ethical behavior?"* (Kivunja & Kuyini, 2017:28). In this case, the researcher ensured that participants voluntarily participated, were not harmed, and remained anonymous. A further discussion on ethical considerations is provided in Section 3.10.

3.4 RESEARCH METHODOLOGY

A research methodology is a plan which connects the paradigm and strategy of inquiry to answer the research questions (Polit & Beck, 2017:463; De Vos *et al*., 2014:307; Creswell & Creswell, 2018:259; Botma *et al.*, 2010:189). It is a blueprint for conducting a research study (Grove *et al*., 2015:20). Given that this study seeks to explore and describe the factors influencing RNs' compliance with quality standards at MMC sites in Lesotho, an exploratory-descriptive design was deemed relevant. This allows the researcher to (1) understand the problem from different angles (De Vos *et al*., 2014:95), (2) study the problem in its natural setting (Brink *et al.,* 2012; Botma *et al.,* 2010), and (3) gain in-depth knowledge on a topic on which limited information exists (Polit & Beck, 2017:463; Grove *et al.,* 2015:20; De Vos *et al.*, 2014:307; Brink *et al.,* 2012:120). The various aspects of the study's research design are now presented.

3.4.1 RESEARCH APPROACH

Qualitative research is a systematic approach that is used to describe and try to understand the experiences and perspectives of a person involved in a specific situation (Brink *et al*., 2012:120; Grove *at al.,* 2015:67; De Vos *et al.,* 2014:308). It seeks to understand meanings and experiences that cannot be quantified numerically to give meaning to the phenomenon under investigation. It is based on inductive reasoning and holistic paradigms and focuses on an individual's understanding of a phenomenon (Creswell, 2013:4). One disadvantage of the design is that the data is subjective (Grove *et al.,* 2015:68). It requires the researcher to be immensely involved in the data analysis (Polit & Beck, 2017:463). Qualitative studies may also be time-consuming, as they involve putting pieces together to make a whole (Grove *at al.,* 2015:68).

Qualitative research allows researchers to describe the research participants' actions in-depth and give meaning to them according to the participants' own beliefs and perspectives (Creswell, 2013:4). Botma *et al.* (2010:182) add that qualitative designs are used when little is known about the subject of interest. Qualitative research generates knowledge from the person involved in the interaction in an in-depth and holistic manner (Polit & Beck, 2017:464).

It is against these characteristics that the researcher decided that a qualitative design would be appropriate to explore and describe the factors that are likely to influence RNs' compliance with quality standards.

3.4.2 Exploratory design

Explorative studies are used when little is known about a phenomenon, and the researcher needs to understand the problem from different angles (De Vos *et al.,* 2014:95). An exploratory approach is also pertinent for studies on clinical practice (Grove *et al.,* 2015:77). Given that there is limited information on the factors that influence RNs' compliance with quality standards in Lesotho, Polit, and Beck (2017:585) and Brink *et al.* (2012:120) recommend the use of exploratory design, as

it aims at an in-depth exploration of a phenomenon. This type of design is contextual in nature and cannot be generalized (Botma *et al.,* 2010:195). The knowledge generated through the interaction with participants helped the researcher identify recommendations that will promote RNs' compliance with quality standards at MMC sites in Lesotho.

3.4.3 Descriptive design

A non-experimental research design is used when more information is needed to answer the research question by providing the picture of the phenomenon as it appears in the natural setting (Brink *et al.,* 2012:112; Botma *et al.,* 2010:110). Descriptive studies provide an examination that requires an in-depth understanding of the phenomenon to gain a comprehensive description (De Vos *et al.,* 2014:96). Grove *et al.* (2015:77) add that descriptive studies are used to identify problems with current practice, make judgments, and develop strategies to address issues with practical solutions. However, descriptive studies are criticized for providing superficial information, as the researcher relies on the information obtained from participants (Botma *et al.,* 2010:110).

Even so, the descriptive design was used in this study since it seeks to portray the characteristics of the phenomenon under study (Polit & Beck, 2017:726). Another advantage of descriptive studies, as pointed out by Botma *et al.* (2010:110), is that they take less time to conduct and are relatively cheaper. In this study, the researcher used descriptive research in an attempt to accurately portray the factors that influence RNs' compliance with quality standards at MMC sites. The literature integration facilitated the interpretation of the findings and formed the basis of the description and recommendations to facilitate RNs' compliance with quality standards.

3.4.4 Phenomenology

Given that the study is qualitative in nature, phenomenology was chosen as the study's research design since it emphasizes the individual's subjective experiences and seeks an individual's perceptions on a phenomenon or experience (Paley, 2017:42; Merriam & Tisdell, 2016:26; McCurry, 2015:25; Marshall & Rossman, 2016:66). Phenomenology focuses on how people interpret their experiences and what meanings they attribute to their experiences (Merriam & Tisdell, 2016:15). It investigates *what* is experienced and *how* it is experienced (Wertz, 2011:125).

Although accused of producing subjective data that requires intense interpretation (Polit & Beck, 2017:473), phenomenology was chosen for this study since it views the setting and the person as an integrated unit (Grove *et al.,* 2015:69). It also allowed the researcher to access rich contextual data (De Vos *et al.,* 2014:316). The phenomenologist's task is to depict the essence or basic structure of experience (Merriam & Tisdell, 2016:26). Therefore, the phenomenological research design provided an opportunity to better understand the complexity of offering MMC service for HIV prevention on a large scale and compliance with quality standards.

3.5 RESEARCH TECHNIQUES

A research technique is defined as the process that the researcher uses to collect data (Botma *et al.,* 2010:290). In this study, the researcher made use of focus group interviews. Focus group interviews allow information to be gathered within a short time and is relatively affordable (Botma *et al*., 2010:110). Details on the research technique used in the study are now presented.

3.5.1 Focus group discussions

A focus group discussion also called a focus group interview is a carefully planned discussion that is done to obtain information on a defined area of interest in a non-threatening environment (De Vos *et al.,* 2014:361; Botma *et al.,* 2010:210). Given that a qualitative research design relies primarily on the collection of qualitative data

(Johnson & Christensen, 2012:41), focus group interviews allow generating information through interaction with participants, providing the facilitator with the opportunity to probe deeply into the responses (De Vos *et al.,* 2014:361).

Krueger and Casey (2009:66) indicate that the intent of focus groups is to determine and understand the range of statements that provide insights about how people in the groups perceive a situation. Therefore, focus group interviews were chosen to generate knowledge regarding the factors that influence RNs' compliance with quality standards at MMC sites in Lesotho. The focus group interview was appropriate to promote disclosure among RNs by creating a platform for communication. In addition, focus group interviews were used to capture the views of participants on the subject that was discussed in a relaxed setting. Sharan and Tisdell (2016:114) outline several benefits and limitations of focus group interviews, as summarised in Table 3.1.

TABLE 3.1: Benefits and limitations of focus group interviews

BENEFITS	LIMITATIONS
One can obtain perceptions, attitudes, and experiences of the participants.	Groups are difficult to manage, and one person may dominate the discussion.
Participants can agree or disagree, creating more energy, and supplementing the data.	Unexpected conflicts might arise, which can inhibit discussion.
Participants share experiences, perceptions, or validate responses as they respond.	Data may be difficult to analyze.
The group is usually homogenous, making it easy for the group to interact.	Moderators need to be skilled to facilitate groups.
It is cost-effective as data is collected from all the members of a group at the same time.	The environment can have a negative impact on the responses.
Provides an opportunity to gather a specific number of participants.	Requires a lot of preparation.

The limitations of focus group interviews were addressed by engaging an independent and skilled facilitator who managed relationships by creating a relaxed and comfortable environment for the participants. This was done to align with Grove *et al.*'s (2015:85) suggestion that the facilitator should ensure that the participants' confidentiality and comfort are maintained so that the discussion can result in rich information. The facilitator also used an icebreaker question, '*What is the best thing*

about being a nurse?' before the actual focus group discussions began to create a positive environment, as De Vos et al. (2014:362) recommended. Participants were also involved in creating an enabling environment by engaging in small talk with the facilitator. The tolerant environment encouraged participants to be open to sharing what they believe are the factors that are likely to influence compliance.

3.5.2 The design of the interview guide

An interview guide is a list of predetermined questions used to engage participants during an interview (De Vos *et al.,* 2014:352). A 15-item semi-structured interview tool was designed by the researcher and was reviewed and approved by the supervisor.The interview tool was used to guide in the study's focus group interviews. It was divided into two sections, Section A and Section B, as shown in Table 3.2.

TABLE 3.2: Outline of the interview guide

MAIN RESEARCH QUESTION	SECTION	QUESTION NUMBER
SECTION A **Biography**	Characteristics of study participants	Question 1
SECTION B **Research question:** What are the factors that can influence RNs' compliance with quality standards at MMC sites in Lesotho?	RNs' knowledge of MMC quality standards	Questions 2a to 2c
	Supervision of compliance to MMC quality standards	Questions 3a to 3d
	Consequences of poor compliance to MMC quality standards	Questions 4a to 4b
	Barriers and enablers to MMC quality standards compliance	Questions 5a to 5b
	Strategies to enhance RNs compliance to quality standards at MMC sites	Questions 6a to 6b

The study's interview guide was designed based on the research purpose as stipulated by Botma *et al.* (2010:206). Five semi-structured questions were developed to guide the discussion with regards to 1) the RNs' knowledge of MMC quality standards, (2) supervision of compliance to quality standards at MMC sites, (3) consequence of (non) compliance to MMC quality standards, (4) barriers and enablers

to MMC quality standards, and (5) strategies to enhance compliance to MMC quality standards at MMC sites. The limited number of questions also enabled participants to talk about the topic at length without being rushed. The questions were arranged in a sequence, from simplest to most complex, to keep participants interested, as suggested by De Vos *et al.* (2014:352).

3.6 POPULATION

A population is defined as a group of objects or persons with the characteristics that can help the researcher generate information and meet the study's inclusion criteria (Brink *et al.,* 2012:13; De Vos *et al.,* 2014:223). This section on population presents the strategies used to select study participants. It focuses on the study sites, target population, sampling techniques, and the inclusion and exclusion criteria.

3.6.1 Units of analysis

The unit of analysis refers to the individual study participants from which information may be generated (Polit & Beck, 2017:747). Botma *et al.* (2010:123) state that the unit of analysis is sometimes referred to as the population. Furthermore, Grove *et al*. (2015:82) suggest that the potential participants should have knowledge and experience or views regarding the subject of interest. In this study, all RNs working at MMC sites in the Lowlands area of Lesotho where MMC services are provided daily were considered as the unit of analysis. Table 3.3 depicts MMC sites and the number of providers at each site.

TABLE 3.3: Sites per number of RNs providing MMC services

MMC Site	Number of RNs
Queen Elizabeth II Government Hospital	6
Scott Hospital	5
Mafeteng Government Hospital	4
Ntšekhe Government Hospital	4
Berea Government Hospital	6
Motebang Government Hospital	6

Total	**31**

Table 3.3 shows that the Queen Elizabeth II Government Hospital and the Motebang Government Hospital had six RNs who provided MMC services. The Scott Hospital has five RNs, while the Mafeteng Government Hospital, Ntšekhe Government Hospital, and Berea Government Hospital each had four RNs providing MMC services. It also shows that 31 RNs were the units of analysis for the study.

3.6.2 Selection of study participants

Sampling is a process of selecting a sample from a population to obtain rich information (Grove *et al.,* 2015:270). Given the qualitative nature of this study, non-probability sampling techniques were employed, where the researcher selects a small, non-random sample based on his or her subjective judgment, or with a specific purpose in mind, to provide rich data for the study (Polit & Beck, 2017:491). The RNs providing MMC services were purposively selected to provide information on the factors that are likely to influence compliance with standards for MMC, as they are believed to have knowledge about the phenomenon under study. When defining purposive sampling, Polit and Beck (2017:494) state that it refers to the deliberate selection of participants who are knowledgeable about the topic under study and have the potential of providing the required information (Polit & Beck, 2017:494).

3.6.3 Determining the sample size

It has been argued that in qualitative studies, the sample size depends on the information that the researcher wants to collect (De Vos *et al.,* 2014:391). The sample size was not set for this study, but the principle of data saturation was used, as suggested by Polit and Beck (2017:497), Brink *et al*. (2012:141), and De Vos *et al*. (2014:367). In this case, four focus group discussions were held. No new information emerged during the fourth focus group discussion, meaning that the data has reached saturation, so data collection was ceased. The sample size per focus group is presented in Table 3.4.

TABLE 3.4: Number of participants per focus group

Focus Group Number	Date	Time	Number of participants per focus group
Focus group 1	27/07/2019	09:00	4
Focus group 2	27/07/2019	14:00	6
Focus group 3	03/08/2019	09:00	5
Focus group 4	03/08/2019	14:00	4
		Total	**19**

Table 3.4 shows that the focus groups were timed for morning and afternoon sessions. It also shows that the number of participants per focus group ranged between four and six participants. This was deemed satisfactory attendance, given that the ideal size of a focus group is usually between five and eight participants (Krueger & Casey, 2009:68). The focus group size also allowed all participants a chance to share their views without some participants dominating the discussions, as mentioned in De Vos *et al.* (2014:361) and Botma *et al.* (2010:211). The duration of the discussions was approximately an hour each. This is in line with Botma *et al.*'s (2010:212) recommendation that focus groups should not exceed 90 minutes to keep the discussion interesting and to limit fatigue in the participants. The focus group discussions were also conducted on a weekend when the RNs were not on duty. An invitation calendar was sent to the RNs, who signed the invitation letters and indicated on which dates they would be available for the interviews. The interviews, therefore, did not clash with their working schedules.

3.6.4 Inclusion and exclusion criteria

Participants had to be RNs who had provided MMC services for one year or more to be included in the study sample. They also had to consent to participation. Registered Nurses who had provided MMC services for less than a year or did not agree to participate were excluded. Registered nurses providing MMC at private clinics were not included in the sample for the main study. They were, however, involved in the explorative interviews, as they did not provide MMC services in high volumes, and they integrated it into other primary healthcare services. The setting, services, and

management of private clinics are quite different from the public facilities regarding MMC service provision.

3.6.5 Explorative interview

Prior to the main study, the researcher conducted an explorative interview, which is a smaller version of the main study (Grove *et al*., 2015:45), to determine whether participants would understand the questions and to pre-empt the problems that might arise in the main study (De Vos *et al*., 2014:395). The researcher conducted explorative interviews with RNs who were providing MMC at private clinics. In this case, five RNs who had more than one year of experience working in MMC from different private clinics were invited to participate in the exploratory interview. The following concepts were used to guide the explorative interview: (1) the RNs' knowledge of MMC quality standards, (2) supervision of compliance to quality standards at MMC sites, (3) consequences of poor compliance to MMC quality standards, (4) barriers and enablers to MMC quality standards, and (5) strategies to enhance compliance to MMC quality standards at MMC sites. The explorative interview results indicated that RNs at private clinics were aware of the MMC quality standards. The factors they mentioned as hindering compliance with quality standards were somewhat different from that of the providers in the main study, as the clinical settings are not the same. For this reason, their views were not incorporated into the main study. They, however, shared similar strategies that may enhance compliance.

3.7 DATA COLLECTION

Data collection is defined as a systematic process of collecting the required information relevant to the research question and purpose of the study (Grove *et al.,* 2015:47). Researchers may use various techniques, such as observation or interviews, to obtain the required information during data collection. Interviewing is the predominant data collection method in qualitative studies (De Vos *et al.,* 2014:342; Polit & Beck, 2017:506). As shown in Section 3.2.3, focus group interviews were used in this study. The data collection process, with regards to the study, will now be explained.

3.7.1 Data collection process

After ethical approval from the Faculty of Health Sciences Research Ethics Committee (UFS-HSD 2019/0887/3007) of the University of the Free State, data collection was done. Additional permission was obtained from the Lesotho Ministry of Health, as MMC sites in Lesotho were used (ID 178-2019). The invitation letters were issued to RNs who met the inclusion criteria, inviting them to participate in the study. The RNs were requested to read the letters for more information regarding the research before deciding to participate so that their participation was free from coercion. Recruitment for the study took place during the MMC quarterly meeting held on the 1st of July 2019. Registered nurses who were willing to participate and who met the inclusion criteria were requested to indicate their interest by signing the letter and providing contact details for further communication. Thirty-one invitation letters were issued, but only 22 letters were signed and returned. Further, only 19 participants arrived for the actual focus group interviews. Interview guidelines were prepared and reviewed beforehand with experts, as advised by Botma *et al.* (2010:207). In preparation for the focus group discussions, the interview guide used during the explorative interviews was again used for the main study, with adjustments on the number and length of questions. As shown in Section 3.2.1, the guide consisted of questions ranging from the RNs' understanding of quality standards to strategies to enhance compliance with quality standards at MMC sites.

The researcher could not facilitate the focus group discussions, as she is responsible for ensuring compliance to standards at the MMC sites under study. This might have resulted in the Hawthorne Effect, a research bias that occurs when study participants' responses are influenced by the knowledge that they are being studied (Botma *et al.*, 2010:86). The researcher is also the quality improvement officer for the area, which might have intimidated the participants or caused bias.

The interviews were held at a private and comfortable venue in Maseru, as it is central and accessible to all participants. The location of the venue was communicated to the participants when the invitation calendar was sent. The venue's facilities were satisfactory, and a *"Meeting in Progress"* sign was posted on the door to sensitize people that there was a meeting going on. Before the actual focus group discussion,

a short demographic data sheet and a consent form for participation and audio-recording were distributed to participants to complete. The discussions were conducted in a mixture of English and Sesotho.

During the interviews, the facilitator guarded against participant who were likely to dominate the discussion by sharing the opportunity evenly among the participants. The participants were encouraged to express themselves freely. The facilitator used different communication skills such as probing, listening, clarification, paraphrasing, and summarising, as stated in De Vos *et al.* (2014:345). At the end of the discussion, the facilitator highlighted the main points and asked participants if these truly reflected their opinions. She also thanked participants for taking the time to attend the sessions. Refreshments were served at the end of the discussion, and participants received transport reimbursement according to the national transport fares.

3.7.2 Field notes

Field notes were also taken to complement the data. Field notes are described as notes that are taken to document unstructured observations and any interpretations noted in the field (De Vos *et al.,* 2014:359). In this study, the co-facilitator made observational notes during the focus group discussions, as the researcher did not participate in the focus group interviews due to possible bias.

3.7.3 Observational notes

Observational notes describe what the researcher noted while engaging with the participants during the discussions (Botma *et al.,* 2010:191). The participants revealed that the focus groups were an opportunity and platform to express the challenges they faced daily at their respective workplaces. Some said that the focus group discussions were therapeutic, as they were able to express their experiences of working in the MMC programme. It was observed that RNs in charge of MMC sites chose the same time and date to attend the focus group interview. They responded to the questions differently from the other groups, and their interview was the shortest. Their answers generally provided responses to subsequent questions, and that made it easy for the facilitator to allow the flow of discussion without too many interruptions.

3.8 DATA ANALYSIS

The aim of data analysis is to systematically organize and derive meaning from the data (Polit & Beck, 2017:530; Brink *et al*., 2012:177). In this study, the interviews were recorded, transcribed, and organized to provide information that would answer the research question and also respond to the purpose of the study (Polit & Beck, 2017:530). Qualitative data analysis is a process of reducing the raw data by sifting and identifying significant patterns in order to have a manageable dataset (Polit & Beck, 2017:530). This allows for themes and patterns to be identified, making it easier for data to be analyzed and interpreted (De Vos *et al*., 2014:397). For this study, data analysis was mainly done using the ATLAS.ti qualitative data software. The importance of qualitative data analysis software is its ability in efficiently storing and locating data (Creswell & Creswell, 2018:268; Botma *et al*., 2010:227). Another advantage of the software is that it locates all text that is associated with specific codes. According to ATLAS.ti Windows 8 User Manual (2020:11), the software may also imports and exports qualitative data to quantitative programmes such as spreadsheets or data analysis programmes, or photographs. However, the researcher still needs to go through each line of text to assign codes, similar to hand-coding of transcriptions. Using the software may, however, be faster and more efficient than hand-coding (Creswell & Creswell, 2018:268).

The data were analyzed using ATLAS.ti Windows 8 User Manual (2020:11) four steps of analysis. These were incorporated into the five steps of qualitative data analysis, as described in Creswell and Creswell (2018:268), as shown below.

3.8.1 Organising and preparing the data for analysis

Creswell & Creswell, (2018:268) indicates that the first step involves the transcription of the interviews and optically scanning material, typing up field notes. Accordingly, this is followed by sorting and arranging the data into different types, depending on the sources of information (Botma *et al.,* 2010:224). The verbatim transcripts that result from capturing the participants' words allow the researcher to attach meaning to people's perspectives (Grove *et al*., 2015:88). In this study, the facilitator who conducted the focus group interviews transcribed and translated the focus group interviews.

3.8.2 Read and re-look at all the data

This second step involves reading through all data transcripts to make a general sense of the information and to reflect on its overall meaning (Creswell & Creswell, 2018:268). The researcher listened to the audio-tapes and carefully read the transcripts several times to ensure that the participants' responses had been captured correctly. At this stage, the researcher enacted step one of ATLAS.ti Windows 8 User Manual (2020:11), which states that the user should create a project, an *"idea container,"* meant to enclose data, all the findings, codes, memos, and structures, under a single name (ATLAS.ti Windows 8 User Manual 2020:11). This was followed by step two, which stipulates that documents, text, graphics, audio, and video, or any other files should be added to the created ATLAS.ti project. The researcher then loaded the translated data transcripts into ATLAS.ti, created a project and started writing her general thoughts about the data in the margins of the transcripts, as advised by Brink *et al.* (2012:193).

3.8.3 Generating codes

The third stage, generating codes, “involves taking text data gathered during data collection, segmenting sentences into categories, and labeling those categories with a term, often based on the participants' actual language” (Creswell & Creswell, 2018:268). These ‘codes’ or abbreviations used to classify words or phrases (Grove *et al.,* 2015:89) are called *in vivo* codes (Creswell & Creswell, 2018:268). The third stage is concerned with organizing data by bracketing chunks and writing a word representing a category in the margins (Botma *et al.,* 2010:224). This tallies with step three of ATLAS.ti’s Windows 8 User Manual (2020:11), which states that the user should organize documents in such a way that codes, themes, and sub-themes develop. When coding the data, the researcher ensured that she had read and familiarised herself with the data. The researcher also made sure that she was familiar with what was in the data and what was of interest in the data. The researcher then determined the most descriptive words for the topics and arranged them according to how they are related to each other. The entire list of categories was reduced by grouping them into major topics, as suggested by Brink *et al.* (2012:194).

3.8.4 Generating descriptions and themes

The fourth stage in data analysis relates to generating themes (Creswell & Creswell, 2018:268). According to Botma *et al.* (2010:225), themes refer to the significant findings during data analysis and are used as headings in the report. Themes should display multiple perspectives from individuals and be supported by diverse quotations and specific evidence. Beyond identifying the themes during the coding process, qualitative researchers can also use themes to build additional layers of complex analysis (Grove *et al*., 2015:89). This stage tallies with step four of ATLAS.ti’s Windows 8 User Manual (2020:11), which states that users should read and select text passages or identify segments on the file that is of further interest, assign codes and write comments and memos. Therefore, when generating themes, the researcher assembled data belonging to different categories and devised themes based on their overall underlying meaning.

3.8.5 Representing the description and themes

The fifth and last step in qualitative data analysis is to decide how the data will be presented to convey the findings (Creswell & Creswell, 2018:268, Botma *et al.,* 2010:225). This step takes place once the researcher has fully established the themes and is ready to write up the report. The most popular approach is to use a narrative passage to convey the findings of the analysis (Grove *et al*., 2015:89). There must be a discussion that mentions a chronology of events. These include (1) the detailed discussion of several themes completed with sub-themes, (2) specific illustrations, (3) multiple perspectives from individuals and quotations, or a discussion with interconnecting themes. In this study, the researcher used themes to convey the findings that influence RNs' compliance with quality standards.

Since this is a phenomenological study, the researcher also ensured that she developed *textural descriptions* (what participants experienced) and *structural descriptions* (how they experienced a phenomenon in terms of conditions, situations or context) and combined them to provide an overall 'essence' of the experience as stipulated by Creswell and Creswell (2018:268).

3.9 TRUSTWORTHINESS

Trustworthiness is defined by Brink *et al.* (2012:141) as the process through which the researcher ensures the truthfulness of the study by deploying different strategies to ensure rigor. In this study, Lincoln and Guba's model(1985) was used to promote trustworthiness, as cited by Polit and Beck (2017:559). This model refers to trustworthiness as the *"truth value"* of the study's findings and demonstrates how accurately the researcher interprets the participants' perspectives on the explored phenomenon. Lincoln and Guba's criteria were used for promoting trustworthiness. This included (1) credibility, (2) transferability, (3) dependability, (4) conformability, and further, the criteria of (5) authenticity (Polit & Beck, 2017:560). These strategies are described in detail in the following section, highlighting how each of these was applied in the study.

3.9.1 Credibility

In qualitative studies, credibility relates to the truth-value of the study. This means the truthfulness of the phenomenon under study and the confidence that the researcher has in the process of data collection and analysis (Brink *et al*., 2012:172). Credibility determines the extent to which the study reflects that the findings of the study are a true reflection of what the RNs stated as the factors that are likely to influence compliance to quality standards at MMC sites. Strategies to ensure credibility are prolonged engagement, observation, member checking, triangulation, and peer debriefing (Botma *et al.*, 2010:233).

In this study, the credibility of findings was enhanced through prolonged engagement, persistent observation, and triangulation. Firstly, the researcher achieved prolonged engagement by investing sufficient time to re-listen to the audio-tapes and reading the transcripts several times to gain an accurate understanding of the information. This allowed the researcher to jot down ideas. The information collected was later used to prepare the sequence of themes that were guided by the focus group interviews. The facilitator also achieved prolonged engagement by investing sufficient time to build rapport with the participants to discuss the subject under study and seek their opinions and (Polit & Beck, 2017:561).

The facilitator ensured that she adhered to persistent observation by focusing on the aspects that the participants revealed during the focus group discussions and the things that the researcher notices during the discussions (De Vos *et al.,* 2014:372). The co-facilitator recorded participants' behavior during the focus groups. The findings formed part of the study findings.

Lastly, triangulation, as a way of employing multiple strategies and using different data sources to obtain information, was used. The researcher ensured that she avoided bias by not using data from a single source but rather from different focus groups made up of RNs from different sites with different work experiences to achieve a consistent and coherent picture of the phenomenon under study. Participants' feedback was also sought after the discussion to confirm that the data gathered was a true reflection of the discussion.

3.9.2 Transferability

Transferability refers to the extent to which the findings that emerged from the population sample can be transferred or generalized to other contexts or other participants (Polit & Beck, 2017:560). However, this will depend on the similarity between the respective contexts. Brink *et al*. (2012:173) state that strategies to enhance transferability are thick description, purposive sampling, and data saturation. As shown in Section 3.4.2, the study participants were selected using purposive sampling, giving the researcher a chance to select the participants deemed most knowledgeable about MMC.

A thick description or detailed account of how data was collected, analyzed, and reported were provided, as suggested by Brink *et al.* (2012:173). In this study, data was collected through the use of focus group interviews by a skilled facilitator who has experience in conducting focus group interviews. Data were analyzed using ATLAS.ti computer-assisted qualitative data analysis software, as shown in Section 3.6. Data saturation occurs when no new information emerges from the respondents (Botma *et al*., 2010:211; Brink *et al*., 2012:173). As shown in Section 3.6.3, focus groups were conducted until no new information was obtained from the participants. To enhance data transferability, the researcher can provide a thick description of the design, the method of exploration, and a description of factors that can enhance compliance with quality standards.

3.9.3 Dependability

Dependability refers to the consistency of the data. If the study is conducted in a similar context with the same participants, the findings will be similar (Brink *et al.,* 2012:172; Polit & Beck, 2017:559). Strategies to achieve dependability include stepwise replication and inquiry audits. Stepwise replication is describing the processes used to conduct the study so that other researchers who want to replicate the study will be able to follow similar steps. An inquiry audit describes a situation where an auditor examines the process of data collection, documentation, and interpretation of results to confirm the findings as well as the meanings attached to it (Brink *et al.,* 2012:17; Polit & Beck, 2017:568). In this study, the research process was clearly explained in such a way that other researchers can attempt to collect and analyze data in the same way (see Sections 3.2 to 3.5).

3.9.4 Confirmability

Confirmability refers to the degree to which general findings are supported by the data and not by the researcher's bias, which is the neutrality, relevance, and meaning of data (Polit & Beck, 2017:560). Strategies to enhance confirmability are audit inquiry, reflexivity, and triangulation (Brink *et al.,* 2012:173). In this study, confirmability was ensured by the triangulation of literature resources and the audit inquiry. Polit and Beck (2017:568) define an audit inquiry as independent scrutiny of qualitative data and the relevant supporting documents by an external reviewer to determine data dependability. The researcher kept the audio-recordings, transcripts, and field notes for verification by an external auditor. Verification will be available upon request from the researcher, independent coder, and supervisor.

3.9.5 Authenticity

Authenticity refers to the extent to which researchers fairly and faithfully show a range of realities as reported (Polit & Beck, 2017:560). A report is authentic if it conveys the tone of the participants and enables readers to develop a significant sensitivity to the issues under discussion (Botma *et al.,* 2010:234).

In this study, authenticity was achieved by audio-taping the focus group interviews and through immediate verbatim transcription. Field notes during the focus group interviews were prepared to report information from the participants.

3.10 ETHICAL CONSIDERATIONS

In this study, ethical principles were considered during the research process as recommended by Grove *et al. (*2015:98), Botma *et al.* (2010:4), and Brink *et al.* (2012:34). There are three basic principles for researchers involving human participants that protect the interests of participants and promote the body of knowledge. These are the principle of respect for persons, the principle of beneficence, and justice, as recommended by Grove *et al.* (2015:98)

3.10.1 Principle of respect for persons

The principle indicates that people should be allowed to decide to participate in the study or not, without any penalty, and they should have the freedom to withdraw from the study at any time (Brink *et al.,* 2012:35; Grove *et al.,* 2015:98). To uphold the principle of respect for persons, participants' autonomy was enhanced by issuing invitation letters to participate in the study during the MMC quarterly review meeting. Potential participants were requested to sign and return the letters if they were interested in participating in the study. Only participants who were willing to participate signed and returned the letters, so participation was voluntary. Written consent was obtained from all participants, as well as permission to audio-tape the focus group discussions. Information regarding the purpose of the study was communicated to the participants during the recruitment and the focus group discussion. Participants were informed that they could withdraw from the discussions at any time without any repercussions.

3.10.2 Principle of beneficence and maleficence

This principle refers to the ethical obligation to secure the wellbeing of the participants by protecting them from unnecessary harm and discomfort (Brink *et al.,* 2012:36; De Vos *et al.,* 2014:115; Grove *et al.,* 2015:174). The researcher did not facilitate the focus group discussions to adhere to this principle, as she oversees compliance with quality standards at MMC sites. It would have caused discomfort to the participants if the researcher facilitated the discussion. The facilitator created a conducive environment by having small talk with the participants and by adhering to the duration time set for the interviews. The facilitators have postgraduate qualifications and experience in conducting focus group discussions. The interview questions were structured in advance, and the participants were monitored closely for any discomfort during the discussions.

3.10.3 Principle of justice

This principle entails the fair selection and treatment of participants (Brink *et al.,* 2012:36). In this study, this principle was adhered to by purposefully selecting RNs who have been providing MMC services for more than a year because they were considered knowledgeable about the topic. Consent to record the interviews were obtained, and anonymity was maintained by not using the participants' names during the interviews. Confidentiality was enhanced by not linking participants with information that was collected from the interviews. Data in the form of transcripts and audio-taped interviews are kept in a secure place for confidentiality. Participants were given transport reimbursement as most of them came from districts to where the focus group interviews were held.

3.11 CONCLUSION

Chapter 3 focused on the context of the study, research design, and methodology followed during the study. The methodology focused on the population, sample and sampling method, data collection, as well as data analysis. This chapter provided the rationale for the strategy used in this research, as different views on the topic were collected from the focus group discussions until no new information emerged. Recordings of the discussions allowed accurate analysis, as the researcher listened to the audio-tapes several times to make sense of the whole. The approaches used to minimize bias were clearly illustrated, such as engaging a facilitator to facilitate the interviews. Strategies to ensure trustworthiness such as credibility, transferability, confirmability, dependability, and authenticity were enhanced by providing all the steps of data collection, information on the participants as well as the methods of analysis. Furthermore, ethical considerations relating to the principle of respect for persons, beneficence, and justice were also discussed. The subsequent chapter presents the research findings.

CHAPTER 4

Presentation and description of findings

4.1 INTRODUCTION

This chapter gives an overview of the findings that emerged from the focus group interviews. It starts by presenting the characteristics of the participants and the findings of the research questions. It then offers a discussion of the results and closes with a chapter summary.

4.2 DATA COLLECTION AND ANALYSIS

Data was collected using focus group discussions. As stated in Chapter 3, the co-facilitator took field notes during each interview. The focus group participants had to answer the following research question: *What factors can influence the RNs' compliance with quality standards at the MMC sites in Lesotho?*

In facilitating the question, the following sub-questions: (a) what knowledge do the RNs have regarding MMC quality standards? (b) What are the barriers and enablers to compliance regarding MMC quality standards? (c) How does supervision quality influence compliance with MMC quality standards? (d) What are the consequences of poor compliance with MMC quality standards?

The participants' responses were organized into themes and sub-themes considered ideal for answering the research question. Three themes emerged from the findings, which highlighted the factors that influenced RNs' compliance with MMC quality standards, namely: (1) knowledge of quality standards, (2) barriers to compliance, and (3) perceived enabling working environment.

4.3 RESULTS

Characteristics of participants

The study's participants came from six MMC sites, namely Queen Elizabeth II, Scott, Mafeteng, Ntšekhe, Berea, and Motebang hospitals. A total of 19 study subjects participated in the study. Five participants were male, while fourteen were female. Eight participants were aged between 25 and 30 years, six between 30 and 35 years, three between 35 and 40, while two were aged 40 years and older. Thirteen of the participants were married, two were divorced, while four were single. Their qualifications showed that nine participants had a Diploma in General Nursing and Midwifery, eight had a Bachelor of Science in Nursing, and two had a Postgraduate Diploma in Nursing Education and HIV and AIDS Management. Ten participants had been providing MMC services for more than five years, and five had been providing MMC for three years, while four participants stated that they had been providing MMC for two years.

4.3.1 Knowledge of quality standards

The theme '*Knowledge of MMC Quality Standards'* showed participants' knowledge of MMC quality standards. Table 4.1 presents a summary of findings concerning knowledge of MMC Quality Standards described by participants during the focus group interviews. Participants knew that MMC quality standards are related to (1) MMC services and (2) MMC sites.

TABLE 4.1: Summary of knowledge of quality standards theme

THEME	Subtheme	Quotation /illustrative responses
KNOWLEDGE OF QUALITY STANDARDS	Facilitation of clients' autonomy	- *Before we operate on a person… if he is above 18, he must provide the informed consent.* - *Besides protecting the clients, it helps us even to protect the providers to avoid any harm that can happen either to clients or the providers or colleagues.* - *We still give him a chance for him to volunteer.* - *When you have given him information about the service that you want to offer him, he should consent.*
	Screening	- *He goes into where he is going to be screened and then when he's found fit for surgery in the screening.* - *We examine the person who has come for services completely.* - *The first one is that VMMC… here we know that a client… when he arrives, he is screened. In fact, he starts in the counseling room first and then we screen it. It is only then that he will go into the procedure room.*
	Verification	- *It can still happen that a person who does the surgery identifies something and that other one in there has missed it.* - *You see we have failed to identify that this person has a bleeding disorder which is that clotting problem, somebody may find it in the operating room during verification.*
	MMC procedure	- *During the procedure, there where you are going to work, there is a way in which you are supposed to do it in. You are supposed to use a certain solution. You have to wash in a certain way… you wait a certain time before you can start and then go ahead and inject him. Even injecting him, you do it in a particular way. You wait a certain time. You must test him first… whether it has taken effect… that thing you have injected him with. You proceed in a particular way… you start here. Even when you do it… to stop the blood, there is a specific way that it has to be stopped. When you make stitches, you have to start somewhere and make the sutures so that you are able to feel certain ones. And how you dress… you bandage in a certain way. You still follow the quality standards that have been specified.*
	Post-operative care	- *When he comes from the theatre his vital signs are taken and then you take him to go in there where he is going to relax… and then we monitor him for 30 minutes before we discharge him.*
	Follow-up care	- *If this entire week we have operated on a 100 people, we have to ask ourselves did all these 100 come for check-up I believe it is increasing the chances of a person being able to be heal quickly… in a proper way.*

The findings revealed that participants know that MMC quality standards are related to the guidelines set forth by the WHO and the Lesotho Ministry of Health. When the question regarding standards was raised, the participants reiterated the following statement as defined by the WHO:

> *"The quality standards are standard operating procedures that we have to work in, that the country has set, basing ourselves say on the WHO guidelines"* (Participant 2, FG3).

According to the WHO (2018:19), safe MMC services are provided in a specific sequence. Participants mentioned the following sequence regarding knowledge of the quality standards in MMC service provision: (1) facilitating clients' autonomy, (2) screening, (3) verification, (4) MMC procedure, (5) observation, and (6) follow-up. This sequence aligns with the WHO's minimum package of MMC services (WHO, 2018:151). These are now discussed.

4.3.1.1 Facilitation of clients' autonomy

The facilitation of autonomy echoes the disclosure of relevant information. Disclosure and understanding are elements of the process of informed consent (Beauchamp & Childress, 2012:124-125). The facilitation of autonomy is intended to enhance the dignity, well-being, and safety interests of all clients (Hinkle & Cheever, 2014:899). The clients' right to autonomy means respect towards all people and to avoid acting in a way that insults or undermines their sense of worth (Grove *et al.,* 2015:101). The findings also revealed that the first MMC quality standard related to facilitating clients' autonomy is intended to allow clients to make their own decisions about whether they would like to continue with the MMC procedure or not. The participants stated that respect for autonomy includes RNs providing clients with full information about the MMC procedure so that they could make an informed decision. The participants said this in emphasizing the importance of capacitating the clients' decision and the signed consent requirements. One of the participants said:

> *"When you have given him information about the service, we give him the chance to volunteer"* (Participant 2, FG 4).

This quote shows that the participants facilitate autonomy to protect both clients and staff from unauthorized procedures. Forcing the procedures onto the clients can strain the relationships between providers, families, and communities and may discourage males from seeking MMC services. Participants cited the prevention of strained relationships as follows:

> *"It is on our side in that a person must give permission to be operated on. So that it should not happen unexpectedly that a father comes from somewhere saying 'You have circumcised my child without my knowledge!"* (Participant 2, FG1).

> *"It helps us even to protect the providers to avoid any harm that can happen. Either to clients or the providers or colleagues"* (Participant 1, FG1).

It became clear that besides avoiding possible bad publicity of MMC services, the consent process is done to avoid any legal repercussions. Brink *et al*. (2012:38) state that accurate and appropriate information should be provided to obtain informed consent/assent in order to facilitate clients' autonomy. This standard is generally adhered to, according to the participants' responses. This is mainly due to the legal implications that are attached to poor compliance with this standard. When informed consent is obtained, clients can proceed to the next step, where the examination is performed.

4.3.1.2 Screening

Screening is described as a way of determining a client's eligibility to undergo a surgical procedure and to exclude contraindications (WHO, 2018:151).

The participants stated that the second standard in MMC quality standards relates to clinical examination, or '*screening*,' where clients are routinely examined before the surgical procedure. From the findings, screening was explained as the process during which the history of the client is taken, and a physical examination is done.

> *"Here we know that a client… when he arrives is screened. In fact, he starts in the counseling room first, and then we screen for eligibility. It is only then that he will go into the procedure room"* (Participant 3, FG2).

> *"Vital signs are taken"* (Participant 3, FG3) and "*Where the patient is talked to in detail"* (Participant 2, FG1).

These findings highlight the WHO's (2018:151) recommendation that screening clients before the surgical procedure must be done routinely to avoid risk factors that may delay the healing process. From the findings, the dual purpose of screening also became apparent. It was to assess the client's suitability for the procedure and to identify any risk factors that might delay recovery. Participants further indicated that if any risk factors were identified during screening, the procedure was not performed.

> "*You examine him completely to see whether he is in a good position to go through with the operation or if there are some things that can prevent him from being operated on that day, he came on… or it will have to be postponed for next time"* (Participant 2, FG1).

However, it emerged from the findings that RNs sometimes only partially comply with screening quality standards due to high workloads.

> *"When clients are many, I am going to end up skipping some of the things. All I want is that they circumcise… that's all. I am going to skip counselling… I am going to skip screening. When I start, I just make them fill out this form… I make him climb the bed. I do the job of cutting. So, such things are not things that are needed" (*Participant 1, FG2*).*

High volumes of MMC clients sometimes cause RNs to deliberately skip specific MMC standards and focus on the procedure itself. However, clients are to be assessed for contraindications to surgery and where necessary conditions that need treatment or referral be done (WHO, 2018:175).

4.3.1.3 Verification

The third MMC quality standard is related to *verification*. Verification in quality management systems is the act of re-assessing systems, procedures, or products to establish if the service or system meets specific regulatory or technical standards (Macmillan Dictionary Online, 2020:n.p.). In research, verification occurs when a researcher is able to confirm the relationship between theory and the actual findings (Grove *et al.,* 2015:274). In MMC service provision, the operating room team ensures that the client is eligible for the procedure as per the findings from the screening.

Participants mentioned that RNs in the operating theatre re-check the client's information, which was provided during the 'physical examination' and 'screening' stages. They stated that this was to confirm that the patient was suitable for the procedure. They also checked that clients had no sexually transmitted infections, which would prevent the procedure from being done. One of the participants said:

> *"For example, err… sexually transmitted infections or maybe he has other diseases and maybe his blood is unable to coagulate quickly"* (Participant 3, FG2).

> *"We may have failed to identify that this person has a bleeding disorder. Somebody may find it during verification"* (Participant 1, FG1).

These findings confirm Hinkle and Cheever's (2014:899) contention that verification is done to confirm the absence of any medical conditions that might have been missed. It is also done to confirm the accuracy of clients' information provided in the screening area and enable providers in ensuring that clients receive the safest and most appropriate care possible (WHO, 2018:64). However, it emerged that verification is

also not fully complied with due to RNs' complacency. The non-compliance to standards was communicated thus:

> *"You will only find… when the person is already on the bed, that this person was not screened. You find that an STI is just there in the middle of things. Sometimes you overlook it and you say 'No, let me provide the service… it doesn't matter… I'll see it after'. Because now you are embarrassed that this person… now I have injected him… I have done this and that… I didn't do some things… all because you are now used to the fact that I work like this… and it turns out you are making mistakes" (*Participant 4, FG1).

From this extract, it is clear that RNs' partial compliance with MMC quality standards in screening and verification leads them to continue with MMC procedures regardless of indicated risk factors. This is particularly concerning, given that sexually transmitted infections are a contraindication to MMC surgery. If a medical circumcision procedure is performed while an STI is still active, the healing process may be affected (WHO, 2018:175).

4.3.1.4 Medical male circumcision procedure

After verification, the findings showed that the fourth quality standard is related to the '*MMC procedure*.' Medical Male Circumcision is the permanent and complete surgical removal of the foreskin (prepuce) that covers the head of the penis (Marieb & Hoehn, 2016:1050). This procedure is conducted under local anesthesia and is offered at healthcare facilities by trained medical officers and RNs. In this study, MMC is performed to prevent HIV acquisition (WHO, 2018:12). The participants indicated that before they commence with the procedure, they often talk to clients to calm them and explain how the procedure will be conducted. The participants stated that there are certain steps to be followed while performing the procedure. One participant explained the procedure as follows:

"During the procedure, there where you are going to work, there is a way in which you are supposed to do it in. You are supposed to use a certain solution. You have to wash in a certain way… you wait a certain time before you can start and then go ahead and inject him. Even injecting him you do it in a particular way. You wait a certain time. Err… you must test him first… whether it has taken effect… that thing you have injected him with. You proceed in a particular way… you start here. Even when you do it… to stop the blood, there is a specific way that it has to be stopped. When you make stitches, you have to start somewhere and make the sutures so that you are able to feel certain ones. And also, how you dress… you bandage in a certain way. You still follow the quality standards that have been specified" (Participant 1, FG3).

The service provider and an assistant performing the circumcision are to uphold standard and take precautions that are proper for the prevention of infection (WHO, 2018:211). It is further recommended that proper handling of tissue done, as to achieve a good surgical outcome of the circumcision procedure and to minimize blood loss (WHO, 2018:211). According to the study findings, the surgical procedure is done according to specified steps to avoid adverse events. After the surgical procedure, the client is accompanied to the recovery room, where he is monitored post-operatively.

4.3.1.5 Post-operative care

The fifth quality standard mentioned by the participants is '*post-operative care.'* During this stage, clients' vital signs are monitored to ensure that they are beginning the recovery process as expected.

"When he comes from the theatre, his vital signs are taken and then you take him to go in there where he is going to relax. Then we monitor him for 30 minutes before we discharge him" (Participant 3, FG3).

The excerpt shows that the participants are aware of this standard as WHO recommends. According to WHO (2018:211), the client is to be moved to another area,

where observations are done for at least thirty minutes before discharge in order to check any complications that may occur (WHO, 2018:269). In the recovery area, the client should be kept comfortable and have his concerns addressed (WHO, 2018:269). Participants mentioned that the client is monitored for bleeding and signs of dizziness or of feeling faint. However, it emerged that being overworked resulted in physical exhaustion amongst RNs, which compromised compliance with standards.

> *"The high of numbers really comprises quality a lot. I am no longer going to spend the time I am supposed to with a client so see how he is afterward"* (Participant 1, FG3).

Although this participant above was aware of the importance of post-operative care, she/he did not adhere to the prescribed standard, as it has been identified that in this period, continuous bleeding may become apparent (WHO, 2018:269). WHO (2018:269) state that close monitoring be done, as well as provision of some instructions, and arrangements regarding the follow-up appointment after 48 – 72 hours.

4.3.1.6 Follow-up care

The last quality standard mentioned by participants was '*follow-up care.'* According to WHO (2018:277), clients who have undergone MMC surgery need to be seen after 48 hours, seven days, and six weeks. The findings showed that this quality standard requires proper wound healing and the reinforcement of instructions.

> *"I believe it is increasing the chances of a person being able to heal quickly… in a proper way"* (Participant 1, FG3).

Clients had to return to MMC sites for follow-up care on stipulated dates. This also confirmed Hinkle and Cheever's (2014:978) statement that follow-up care is strongly recommended for post-procedure care. During the follow-up, health information is re-enforced, the wound is examined, and the patient's general physical status is assessed. This is essential in the prevention and management of complications.

It emerged that this was done to prevent and keep track of any MMC adverse events and also as a quality improvement activity.It was found that RNs generally comply well with this standard, as RNs reflected on clients who had come for follow-up care as illustrated by Participant 2:

> *"If this entire week we have operated on a 100 people, we have to ask ourselves did all these 100 come for a check-up"* (Participant 2, FG1).

In summary, the theme '*Knowledge of MMC Quality Standards'* addressed the quality standards related to MMC services and sites. Concerning MMC services, participants showed that quality standards are related to six key areas: (1) facilitating clients' autonomy, (2) screening, (3) verification, (4) MMC procedure, (5) post-operative care, and (6) follow-up care. MMC quality standards outline all the steps that are required to provide a safe and efficient medical male circumcision service .package. The provision of MMC services in a logical sequence assures that all steps of MMC are included to in the service provision. Medical Male Circumcision services that adhere to quality standards are expected to attract a vast numbers of adolescent boys and men, and this will lead to decreased HIV infections and ultimately improving the populations' health outcomes hardest hit by HIV.

4.3.2 Barriers to compliance

The theme '*Barriers to Compliance'* indicates the issues influencing RNs' low compliance with MMC quality standards. Table 4.2 presents a summary of findings concerning barriers to MMC quality standards compliance as described by participants during the focus group discussions.

TABLE 4.2: Summary of barriers to compliance theme

THEME	Subthemes	Quotation/Illustrative responses
BARRIERS TO COMPLIANCE	Inadequate material resources and poor infrastructure	- *It is said that you should discard the sharps container when it is three quarters you should take it out. But now the bin is not there.* - *Sometimes we don't have povidone solution, which is the one we use to clean patients.* - *Like we request a car, you'll just hear that there is little money left and we are no longer going to be hired two cars but one.* - *The office itself still does make things difficult for us by limiting the resources.* - *Another one can be an issue of infrastructure… we compromise the work because we don't have the space where we work.*
	MMC targets	- *We work with targets… there will be a target that is put for the quarter, the month, the week... the day.* - *But surprisingly it is that… the day when you have done many, it cannot be that tomorrow it is said 'rest'…you have those for five days'. Tomorrow they want tomorrow's target forgetting that you have made the week's target in a day.* - *Work pressure of targets.* - *You will find that really many times when you chase quantity… which is what is supposed to help you to reach the target, you end up compromising issues of quality.* - *We are working for long hours wanting to serve the people so that they do not wait for too long outside.*
	Expanded scope of practice	- *Being expected to do everything as a nurse. There is never a time when you can say a data clerk should go and do the check-ups. However, as a nurse, you will collect data. You will counsel… you will be a nurse. You will even be a doctor. Like… all of them. It will be expected that you do everything.* - *I think that the nurses should not be jacks-of-all-trades.*
	Negligence by RNs	- *When they are many… that is… just by looking at them, I am already messed up here in the head. I do not know where I am going to begin and where I am going to end. I am going to end up skipping some of the things. All I want is that they circumcise… that is all. I am going to skip counselling… I am going to skip screening.* - *It is through our carelessness as the staff. That we have stock outs… if in the storeroom… we don't record what we are taking out.*
	Overconfidence of nurses	- *Another one is thinking that we are used to things… you now feel you are now used to it.* - *When you now think that 'ah… I have five years working here. Ah… that thing… I can do that thing with my eyes closed.'*
	Clients and societal issues	- *You would have told him 'you should come for a check-up after 2 days… you should come and remove dressing'. He will not come.* - *You will find that we are providing services to our community that has little knowledge.* - *That there are still some people whom you will find that… right now VMMC is still being done, but there are some people who are still so much against it. They are still unable to differentiate it from the traditional initiation.*

Participants mentioned challenges with infrastructure and material resources as barriers to compliance with standards. It has been said that providing the male circumcision services while the physical space does not allow may lead to bottlenecks in the flow of services. The sites for MMC may vary, however, the site should have sufficient space and necessary resources for providing counselling, performing safe circumcision, managing emergencies (WHO 2018:57).
The circumstances that participants described as barriers to compliance with quality standards regarding MMC service provision will now be discussed.

4.3.2.1 Inadequate material resources and poor infrastructure

Material resources refer to structural attributes such as facilities, equipment consumables, drugs, and supplies (Cambridge Online Dictionary, 2020:n.p.). Participants mentioned that they have challenges with pharmaceutical supplies, such as povidone-iodine and paracetamol, at some facilities. Stock shortages are limiting them to provide the full-service package of MMC. Sleeth, Bach & Summers (2012:12) and Dookie and Singh (2012:1) confirm that resource constraints related to finances, infrastructure, and equipment, can negatively affect service quality. The challenge with resources was communicated like this:

> *"Like we request a car. In the middle of things, you will just hear that there is little money left and we are no longer going to be hired two cars, we will be hired one"* (Participant 1, FG1).

Aside from the above-mentioned challenges, participants also mentioned that they worked in an environment where space is limited.

> *"Even the place where we work, we just push our heads… just so that we are able to do our work"* (Participant 5, FG2).

> *"We compromise the work because we do not have the space where we work. Things are not separated… they are in the same place. You just push… you ignore such"* (Participant 4, FG2).

The challenges with resources lead them to compromise quality standards regarding various aspects of MMC. Oosthuizen and Van Deventer (2010:1) support the above statement by mentioning that health systems should be structured to deliver services that address people's needs, as well as to produce desired outcomes. However, Omondi-Aduda *et al.* (2015:3) emphasize the use of efficiency and productivity in implementing MMC services. According to Jennings *et al*. (2014:08), MMC is complex and requires intensive resources. The emphasis is that inputs used to produce the outputs and service quality have to be evaluated so that resources are optimally used, even in adverse situations, to deliver the desired targets.

4.3.2.2 Medical male circumcision targets

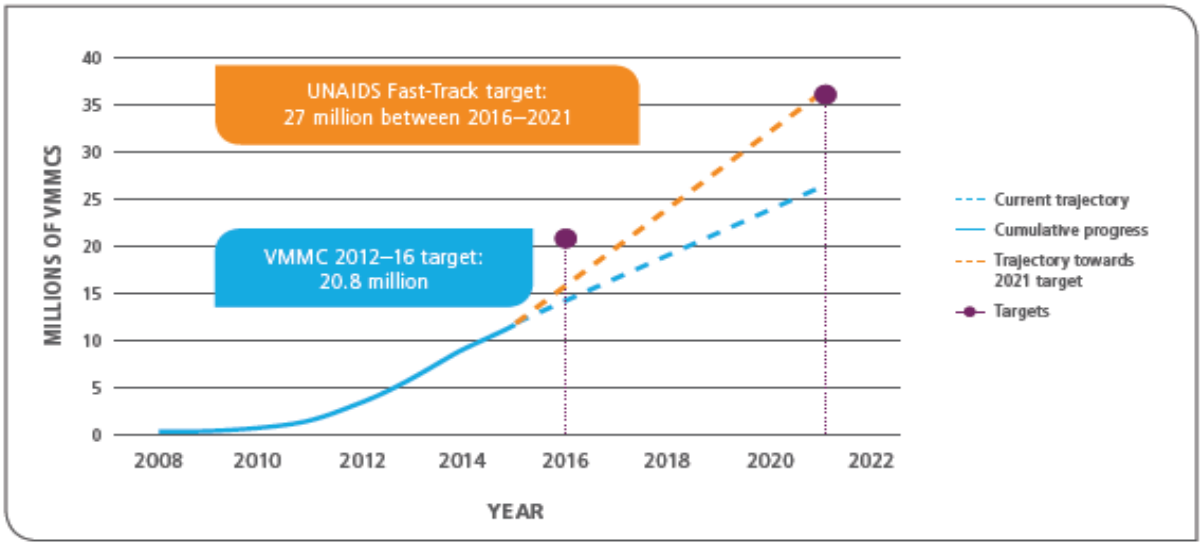
A target is a set of performance goals required to achieve a milestone (Macmillan Dictionary Online, 2019:n.p.). Participants reported that the ambitious targets set by donors and senior management, despite limited human resources, contribute to poor compliance with quality standards. High targets lead to hurried surgery that results in surgical errors, frustration, and burnout among MMC providers. Similar findings emerged in a study conducted by Perry *et al.* (2014:5). MMC providers in Kenya, South Africa, and Tanzania also articulated burnout due to high targets, long working hours, and monotony in repeating the same procedure. Megeus *et al*. (2015:4) also identified the challenges of high workloads and low adherence to quality standards. Participants communicated the challenges of targets in the following way:

> *"We work with targets… there will be a target that is set for the quarter, the month, the week... the day. Let me make an example, say the target is a provider should serve 20 patients in a day… but the staff is not there. It is the two of you at the site. You must pursue the target. At the same time, you must provide quality services. Therefore, you will find that when you chase quantity to reach the target, you end up compromising issues of quality"* (Participant 2, FG1).

> *"However, surprisingly it is that… the day when you have done many, it cannot be that tomorrow it is said 'rest'… you have those for five days'.*

Tomorrow they want tomorrow's target forgetting that you have made the week's target in a day" (Participant 4, FG3).

The extracts above demonstrate that participants are driven by the demand made by the donors. Approximately 27 million circumcisions are needed among males aged 15 - 49 years in the 14 Eastern and Southern African countries by 2021 (WHO, 2016:10). In 2016, 20.8 million circumcisions were performed. In Lesotho, 376,795 circumcisions are required to reach 80% of the eligible boys and men by 2022 (Government of Lesotho, 2012:2). To date, approximately 200,000 circumcisions have been performed since 2012 (LePHIA, 2019). Studies conducted by Njeuhmeli, Forsythe, Reed, Oponi, Bollinger, Heard, Castor, Stover, Farley, Menon and Hankins (2011:2), Sgaier *et al.* (2014:2), and Omondi-Aduda *et al.* (2015:3) demonstrate that male circumcision services require comprehensive and rapid coverage to realize the maximum impact and to avert new infections. Figure 4.1 shows actual circumcisions performed in the fourteen Eastern and Southern African countries so far and the projected targets towards 2021.



Source: UNAIDS, Joint United Nations Programme on HIV/AIDS; VMMC, voluntary medical male circumcision

FIGURE 4.1: Actual and projected progress towards MMC set targets in 2011

The set targets require a significant investment in human resources, especially where providers are already stretched to capacity (Perry *et al.,* 2014:1). Different approaches

have been used to address the shortage of human resources, such as task shifting and sharing; and the use of retired providers (Curran, Njeuhmeli, Mirelman, Dickson, Adamu, Cherutich, Mahler, Fimbo, Mavuso, Albertini, Fitzgerald, Bock, Reed, Castor and Stanton, 2011:2). Nonetheless, matching targets with human resources remains a challenge, as MMC services are influenced by factors such as seasonality, accessibility, and acceptability (Sgaier *et al*., 2014:2). Izumi (2013:3) states that there is high patient-nurse ratio that is likely to result into a high mortality rate as well as negative quality of life outcomes. Furthermore, unsatisfactory working conditions, burnout, and job dissatisfaction have led to the RNs in this study feeling disempowered and morally distressed.

4.3.2.3 Expanded scope of work

The findings revealed that a shortage of human resources has led to the expansion of the RNs' scope of practice. The International Council of Nurses (ICN), states that a scope of practice outlines registered nurses' practice. This is defined by legislative and regulatory frameworks and describes the preferred competencies of a registered nurse (ICN, 2012). Registered nurses said they are expected to perform both nursing and non-nursing duties at work. This may lead to perceptions of unfairness and role strain and may also offer some explanation for the poor compliance with MMC standards as described by participants.

> *"I think that the nurses should not be jacks-of-all-trades. You should know that if you are a nurse… you are a nurse. The team should have all the people. It should be the counsellor, the data capture clerk… it should have the two nurses or a nurse and a doctor. Because when it is like that… everyone does their work in a complete way. But if you are a nurse by yourself… you start there… from counseling all the way through to that side"* (Participant 4, FG3).

The registered nurses' scope of practice has evolved and expanded to address emerging diseases and to respond to the changing needs of society (Feringa, De Swardt & Havenga, 2018:1). The scope of practice for Lesotho RNs regulates the

competencies that a new graduate registered nurse should display when working in the Lesotho healthcare system (Lesotho Nursing Council, 2014:2). The HIV epidemic has created new roles for nurses, such as the prescription of anti-retroviral drugs and performing male circumcisions (Feringa *et al.,* 2018:2). While this may be viewed as an advantage in the nursing profession and an initiative that responds to the needs of communities, it has also led to unintended frustrations and compromised quality of care. One of the participants expressed their frustrations in the following way:

> *"Being expected to do everything as a nurse. There is never a time when you can say a data clerk should go and do the check-ups. However, as a nurse, you will collect data. You will counsel… you will be a nurse. You will even be a doctor. Like… all of them. It will be expected that you do everything"* (Participant1, FG3*).*

The researcher believes that senior management should employ more RNs to enable them to cope with the expanded roles. Management should also shift some tasks/duties to the lower cadres, such as nursing assistants and ward attendants. However, the delegated tasks will require training and competency assessment to be carried out successfully.

4.3.2.4 Overconfidence by nurses

It emerged that RNs' attitudes towards their work prevent them from adhering to MMC quality standards. Participants mentioned that poor compliance with quality standards is sometimes attributed to their attitude. Attitude is defined as the learned dispositions for responding either favorably or unfavorably to a particular person or situation (Macmillan Dictionary Online, 2020:n.p.). Permana and Hidaya (2018:241) state that attitudes influence individuals' behavior in either a positive or a negative way. The attitudes of RNs led them to neglect their work, consequently exposing clients to unnecessary harm.

Participants in this study mentioned that low compliance to quality standards might be due to overconfidence. Providers may become overconfident when they continually

perform the same procedures. That often leads to them developing techniques to cut corners (Park, Byun & Choi, 2019:1). Participants expressed these feeling of overconfidence in the following way:

> *"When you now think that, 'Ah… I have five years working here. I can do that thing with my eyes closed', that thing causes problems"* (Participant 3, FG1).

> *"Another one is thinking that we are used to things… you now feel you can do anything"* (Participant 4, FG4).

Efstathiou *et al.* (2011:6) support this study's findings that nurses with considerable clinical experience sometimes do not adhere to guidelines. Besides this, the findings showed that RNs' attitudes towards work ethics sometimes prevent them from adhering to MMC quality standards.

> *"There are some people whom we refer to as lazy… she does not want to do what is correct because she is lazy to do that. For example, you will be having all the resources, but feel like you will not be able to… to take off the glove between so and so, who are clients"* (Participant 2, FG4).

Participants also stated that carelessness in one's work brought on by overconfidence in one's skills often leads to poor compliance with quality standards. Cassam (2017:1) argues that overconfidence may not necessarily result from work experience, but rather a result of personal qualities that can affect compliance with standards. Furthermore, Shah *et al.* (2015:8) state that registered nurses' behavior is influenced by local practices, individual preferences, and some degree of professional socialization. Izumi (2013:5) believes that professional values are a pillar of the nursing profession, and therefore, there is a need for values to be clarified to avoid challenges with unethical conduct.

4.3.2.5 Negligence by nurses

In this study, RNs mentioned that sometimes they do not provide quality services due to negligence and not out of ignorance. Negligence is defined as a failure to offer someone enough care or attention (Cambridge Dictionaries Online, 2020:n.p.). Negligence was also identified as a barrier. Besides this, participants also indicated that not paying attention at work and skipping certain stages in the MMC process also led to non-compliance with quality standards.

> *"It is through our carelessness as the staff that we have stock outs… if in the storeroom… we do not record what we are taking out"* (Participant 4, FG4).

> *"You will find that they still know that certain things have to be done this way… but we just do not care"* (Participant 2, FG1).

> *"You only wash your hands once or twice. You feel like, 'Why should I wash my hands, yet I am still going to glove?'"* (Participant 3, FG3).

Registered nurses often take shortcuts while providing services, and eventually, this becomes a norm. Shah *et al.* (2015:127) believe that many factors influence individual behavior, so targeting the behavior without addressing the contextual influences may not avert the real causes of poor compliance. There is a correlation between attitude and compliance with quality standards, as shown by the participants in this study. However, this effect is aggravated by increased workload and stress. Izumi (2013:2) states that registered nurses are bound by their ethical responsibilities and professional values to provide services that are of high quality and meet the minimum standards regardless of the situation. Oosthuizen and Van Deventer (2010:1) state that RNs need to have a culture of doing the right thing even when no one is watching, which is called integrity. Nursing is a profession that is governed by professional values and ethics. Therefore nursing services should be rendered with full adherence to professional ethics regardless of the situation.

4.3.2.6 Clients and societal issues

It has also emerged that societal attitudes regarding MMC hamper RNs' efforts to adhere to quality standards.

> *"You will find that we are providing services to our community that has little knowledge in rural parts of the country. You would have told him 'You should come for a check-up after 2 days. You should come and be untied'. He will not come… you will try to look for him… he is not there. He will be telling you that 'I did remove it myself that thing'. He will be the one that contributed to an infection"* (Participant 1, FG1).

Clients' issues and cultural beliefs contributed to poor compliance to standards in this study. Culture forms the backdrop of how people think, feel, speak, and act (Booyens, 2015:197). In Lesotho, MMC is provided in a culturally sensitive manner. However, participants in this study have expressed that providing services that are, in a way, competing with cultural practices poses challenges in complying with standards for Medical Male Circumcision. Participants mentioned that some men do not want to be seen at MMC clinics during the day. They prefer to access the services at night and do not return for follow-up care. The challenge is highlighted in the following statements:

> *"There are still people whom you will find that… right now MMC is still being done, but there are some people who are still against it. They are still unable to differentiate it from the traditional initiation"* (Participant 4, FG4*).*

In Lesotho, traditional initiation continues to be practiced as part of the rites of passage into adulthood. Medical Male Circumcision, therefore, face challenges in certain communities (Bulled, 2014:759). There is still antagonism between Medical Male Circumcision and traditional initiation in Lesotho, as is also the case in other African countries (Katisi & Daniel, 2018:22).

In summary, under the theme *'Barriers to compliance,'* factors that are limiting compliance with standards were discussed. Resource constraints, including infrastructure and equipment, can affect service quality. Registered nurses' attitudes influence MMC services in a negative way. Similarly, barriers were identified at the community level, where cultural practices lead clients to disregard RNs directives, leading to sub-standard services.

4.3.3 Perceived enabling working environment

The theme '*Perceived enabling working environment'* shows factors that enable RNs compliance with MMC quality standards. Table 4.3 below presents a summary of findings concerning the perceived enabling working environment to enhance compliance with MMC quality standards described by participants during the focus group interviews.

TABLE 4.3: Summary of perceived enabling working environment theme

THEME	Subthemes	Quotation /illustrative responses
PERCEIVED ENABLING WORKING ENVIRONMENT	Capacity development	- *The issue of the refresher trainings to improve practice* - *Updated Standard Operating Procedures that are always on the walls, with which we are able to always remind ourselves* - *But the issue of these SOPs and the job aids that we will be having… they help us to adhere to our MC standards* - *They're some standard operating procedure that we have to follow so that we can say 'now we have done the quality standards'*
	Supportive supervision	- *Regular supervision is needed to mentor providers* - *Another one… our supervisors should always be visiting us… to learn. They shouldn't go once when there are visitors who are coming because now we relax* - *Supervisors should come to motivate us not come only when they are going to fight with us. They should just come to see how you are still carrying on* - *And regular supervision from our supervisors*
	Provision of support	- *Nurses need counselling* - *Another one is being appreciated and getting support* - *Honestly, if you have ever done well you should be given a pat on the shoulder yourself so that you feel that 'no, I am still being recognized'* - *There should be a time when we will be brought here… honestly and be told that we are appreciated*
	Provision of human resources	- *It is to provide adequate staff because when the staff is enough* - *Myself I think at the site the most important thing is to increase the issue of human resource* - *If there is a lot of staff and we are not overburdened by work… we are able to do work in a very skillful way* - *To provide adequate staff because when the staff is enough if there will be a nurse in the screening room a nurse in the OT and a nurse that discharges. It means there will never be issues of things of quality*

The theme '*Perceived enabling working environment'* illustrated the contextual issues that would enable RNs to comply with MMC quality standards. The findings revealed that providing training and support, supportive supervision and additional human resources to MMC staff would enable them to comply with MMC quality standards. These are now presented.

4.3.3.1 Capacity development

Participants stated that regular refresher training provides different perspectives on the challenges encountered at work and that such training inspired RNs to improve their skills better. Capacity development is described as the power to learn or to retain knowledge (Cambridge dictionary online, 2020:n.p.). The findings also revealed that the availability of trained staff would enhance compliance with MMC quality standards, as the work would be divided amongst capable hands, thus making the MMC services more efficient. Participants also mentioned that the availability of standard operating procedures supports the knowledge gained through refresher training. This is how participants expressed the need for capacity development:

> *"If refresher trainings are given continuously, even where we did not know… we are going to remember when we are being trained continuously"* (Participant 1, FG1*).*

> *"Updated Standard Operating Procedures that are always on the walls, with which we are able to remind ourselves"* (Participant 4, FG2).

> *"Refresher trainings… they can even be held right here. Yes, we are going to get different ideas from… their challenges. The challenge that I encounter is different from challenge that this woman encounters. Even herself… in her work… even though we are still doing the same kind of work. So you are able to… you grow"* (Participant 1, FG4).

Participants mentioned that refresher training courses should be of short duration, as there is high staff turnover that results in the loss of skilled and knowledgeable providers. In support of what participants said, Aguinis (2013:40) states that refresher training enhances knowledge and skills acquired through continuous learning. In-service training is often also beneficial in improving registered nurses' knowledge and skills, resulting in improved health outcomes (Permana & Hidaya, 2018:240). Jennings *et al*. (2014:2) support the findings that providers' provision of knowledge and involvement in the quality improvement process increase compliance with quality

standards. According to the results of this study, researchers can conclude that there is a relationship between knowledge and compliance with quality standards. The findings also affirm the correlation between training, socialization of workers, improvement measures, and feedback as the backbone for compliance with quality standards (Sgaier *et al.,* 2014:6).

4.3.3.2 Supportive supervision

To supervise is to be in charge of an activity or a place and to check that things are done correctly (Macmillan Dictionary Online, 2019:n.p.). Participants stated that the supervision of compliance to standards is a requirement. Supervision is important as service quality is not finite and has to be continually worked on. The participants said that RNs would not always be reminded to check for compliance with quality standards, but they would get favorable performance appraisals in any case. This is how they expressed their desire for supportive supervision:

> *"If our work is checked. The procedure, when you are doing it in a proper way, you are scored highly"* (Participant 2, FG4).

Supportive supervision is one of the management functions that help identify gaps in service provision and address them accordingly (Booyens, 2015:238). However, it was realized that continuous supervision was sometimes reactive and not proactive. One participant said:

> *"Our supervisors should always be visiting us… to learn. They should not go once when there are visitors who are coming because, now we relax"* (Participant 3, FG3).

In this regard, the findings showed that managers and supervisors sometimes fail to plan for potential problems at MMC sites. Supervision is also not always active. Instead, it is often only done when there are specific issues or when an important activity or assessment by donors needs to take place.

> *"Supervisors should come to motivate us not come only when they are going to fight with us. They should just come to see how you are still carrying on… where do you need help? Not only come at the time when they are going to fire us up. 'This time you have done 1…2...3 that are not correct'. They should come with the spirit that increases our strength"* (Participant 4, FG3)**.**

From what the above participant has mentioned, it is clear that participants prefer collaboration and not confrontation with their supervisors. Supportive supervision creates a positive working environment and motivates employees. Participants indicated that there is a team at the central and at the site level that oversees compliance with quality standards. At the central level, the participants stated that the teams are composed of directors and operational managers. This team mainly plays an oversight role and checks compliance with MMC quality standards at MMC sites on a quarterly basis. Conversely, the site level quality improvement teams are made up of the management of the hospital, a district coordinator, nurses, data clerks, counselors, and cleaners. These teams routinely monitor for compliance and meet monthly for site assessment.

> *"So, it is sat monthly… to review… the team sits to check whether there are any quality issues that we might need to decide how best to deal with them. Sometimes there can be a team and then ourselves… as members, we can assess ourselves. We have self-assessments, while we are still a team. So the quality assurance team or the quality improvement team… its job it to ensure that… is to make sure that things like those… measures like those ones… they are in place. So that we are able to keep on self-assessing ourselves and so on"* (Participant 4, FG1).

At this level, the findings showed that two teams (organizational and site level) work in tandem to ensure that RNs adhere to quality standards. As stipulated by Byabagambi *et al.* (2015:3) and Muller (2009:257), the quality improvement teams routinely perform site-level quality assessments using tested methodologies to improve performance. This was highlighted by participants in this manner:

> *"Another one I believe is that one of self-assessment. We are still supposed to do self-assessments on a monthly basis… it will end up being routine"* (Participant 6, FG2).

According to the Quality Improvement Framework, this practice aims to identify small-scale interventions that work well and implement them more broadly to improve clinical practice. Booyens (2015:263) also added that when someone routinely demonstrates engaging in quality improvement, it indicates ownership of the process. It also explains the findings from this study that the establishment of quality improvement teams improves the quality and safety of MMC services in Lesotho to a certain extent. Megeus *et al.* (2015:6) deduce that strong clinical governance and leadership are the core drivers of compliance to quality standards across all aspects of healthcare operations.

Booyens (2015:229) states that supportive supervision does not necessarily improve compliance to quality standards, organizational climate, good coordination, resources, and communication, while policies and regulation do improve adherence to quality standards.

4.3.3.3 Provision of support

Participants saw the provision of support as necessary to help managers appreciate and acknowledge the MMC sites' working conditions. They felt that it would also lead RNs to stop feeling disconnected from their supervisors. Such support would allow supervisors to gain first-hand information about the RNs' real working conditions and not just rely on reports for that. Bailey (2014:28) describes support as the act of providing what is needed to help in situations. Participants mentioned that one of the things that enable them to provide quality services is support from the senior management/supervisors. The provision of ongoing technical support to the clinicians improves compliance with quality standards (Bailey, 2014:28).

> *"If it happens that when I am working… and the work is a lot… I see my boss arriving to support… to say, 'What are doing? What are your challenges? Like… how do you think we could help you?' Those are the things that make me feel like I am motivated and then I am able to push… even if the situation is difficult"* (Participant 2, FG3).

This type of support should identify structural elements that are fundamental to quality service provisions, such as resources, adequate staff, and health workers' competency (Booyens, 2015:228). This, according to the quality improvement framework, motivates providers to comply with set standards. It was evident that the participants needed management support to be able to comply with quality standards. The study findings also showed that senior management support would enable RNs to better comply with MMC quality standards. For some participants, this included recognition for the hard work of a high standard that they do daily. One of the participants expressed the need for support like this:

> *"Another one is being appreciated and getting support. Honestly, if you have ever done well you should be given a pat on the shoulder yourself so that you feel that 'no, I am still being recognised'"* (Participant 4, FG1*).*

Mosadeghrad (2014:86) indicates that management support is needed to adhere to quality standards, and it may be incorporated with the application of techniques and tools to operationalize quality management. Inadequate support from supervisors and the senior management team demotivates service providers from complying with quality standards. Mmamma, Mothiba, and Nancy (2015:4) state that insufficient backing from top management during healthcare services' implementation harms compliance to quality standards. Providing ongoing technical support to clinicians improves compliance with quality standards.

4.3.3.4 Provision of human resources

Participants stated that staff shortages result in high workloads. Despite this, there is still an expectation of implementing the required quality standards. Human resources are the planning, provision, utilization, and retention of staff (Muller, 2009:302). Challenges with human resources in Lesotho MMC sites have been identified as the major factor limiting compliance with quality standards. This is highlighted in this statement:

> *"Uh-uh ma'am. I think it is that issue of lack of human resources and work overload. That is… those are the top-most issues"* (Participant 2: FG3).

The results are similar to those reported by Perry *et al*. (2014:1) and Megeus *et al.* (2015:4). The issue of resources was also highlighted in other studies that inefficient healthcare systems and insufficient staffing negatively affect compliance with standards (Efstathiou *et al.,* 2011:2; Permana & Hidaya, 2018:240).

> *"Honestly so that when the staff is needed it is available. I have seen that we are able to work in a way that is much better. Because when the three of you continue working at the site and it is expected that you do 210 a week… without your hands being increased, it becomes heavy. Whereas if the hands continue to be there, you are able to divide the work"* (Participant 4: FG1).

> *"Say the patients are many outside there… they are occupying the entire bench and it is just the two of us. When they are many… just by looking at them, I am already messed up here in the head. I do not know where I am going to begin and where I am going to end"* (Participant 2, FG3).

A shortage of nursing personnel at healthcare facilities and unrealistic workloads limit nurses' flexibility and adaptability and predispose them to increased fatigue and the risk of errors (Moosa & Gibbs, 2014:149). Scaling up male circumcision requires adequate human, financial, and material resources to meet the desired targets (Njeuhmeli *et al.,* 2011:1). The extract below accentuates this fact:

> *"It is to provide adequate staff because when the staff is enough… if there will be a nurse in the screening room… a nurse in the OT… and a nurse that discharges. It means there will never be issues… of things of quality"* (Participant 1, FG2).

Limited human resources jeopardized the quality of care and contribute to poor patient outcomes. Nurses become demotivated, demoralized and rush through clients resulting in errors. Njeuhmeli *et al.* (2011:13) argue that human and other material resources have to be in line with the volume and site capacity. Therefore, scaling up Medical Male Circumcision requires adequate human, financial, and material resources to meet the desired targets (Njeuhmeli *et al*., 2011:1).

In summary, the theme *'Perceived enabling working environment'* showed that the supervisory role of the continuous promotion of quality services ensures compliance and decreased adverse events. Where supervision is irregular, healthcare workers find it easy to deviate from set standards. Supervision should not focus on faults but should instead address gaps and focus on strengthening systems to create an enabling environment for RNs to comply with quality standards. However, there was a perception among the participants that the supervision style at MMC sites is reactive and critical, undermining the motivation of RNs.

Compliance with quality standards is dependent on providers' knowledge and skills, so training and manager support are required. There should be a balance between human resources and workload to avoid long patient waiting times and hurriedly completed procedures. Supportive supervision creates a positive working environment and motivates employees. For MMC sites, compliance to quality standards is mainly the responsibility of site-level quality improvement teams, while organisational-level

quality improvement teams play an oversight role. The findings showed that these MMC quality improvement teams track adverse events and their causes and may suggest possible solutions to enhance the quality of MMC services.

4.4 CONCLUSION

In this chapter, the findings of the focus group discussions were divided into themes and sub-themes. The themes were based on the factors that are likely to influence RNs' compliance with quality standards at MMC sites in Lesotho. Themes were formulated from the participants' statements and integrated with relevant literature to add to the richness of the data. Detailed recommendations for nursing practice, nursing education, policy formulation and future programme design will be discussed in the next chapter.

CHAPTER 5

Discussion, conclusions, recommendations, and limitations

5.1 INTRODUCTION

The previous chapter presented the study's findings that were substantiated with relevant literature. This chapter provides a discussion of the findings and the conclusions. The recommendations are based on the study results and provide avenues for future research. Lastly, this chapter presents the limitations of the study.

5.2 DISCUSSION OF FINDINGS

The study wanted to understand the factors that influence compliance with quality standards at MMC sites. After conducting a literature review, the researcher could not find research that focused on factors influencing compliance with standards at MMC sites in Lesotho. Three themes that emerged from the findings highlighting the factors that influenced RNs' compliance with MMC quality standards were: 1) knowledge of quality standards, (2) barriers to compliance, and (3) perceived enabling working environment.

5.2.1 Registered nurses' knowledge of MMC quality standards

The findings show that although RNs are knowledgeable about the MMC quality standards, however, they often partially comply with the standards due to high workloads. The results show that standing for long hours and serving many clients takes a toll on MMC providers regarding physical strain and emotional exhaustion. The reported compliance level was comparable with the results reported in previous studies (Sgaier *et al.,* 2014:2; Shah *et al.,* 2015:127). Perry *et al.* (2014:1) suggest that employers should address workforce issues such as training and staff motivation to

enhance performance. Staff retention strategies should also be prioritized for the entire working lifespan to facilitate compliance with standards. The reasons for compliance with standards include comprehensively attending to patients and ensuring safety by minimizing the occurrence of adverse events, while at the same time ensuring cost-effectiveness (Oosthuizen & Van Deventer, 2010:1; Muller, 2009:254-255). In this study, RNs mentioned that the main benefit of compliance with quality standards is that more people will use circumcision services, which will curb new HIV infections.

Flodgren *et al*. (2016:6) state that commitment to compliance with quality standards will be demonstrated by teams carrying out self-assessment. Periodic audits may also be performed to inspect performance, and feedback should be given. Thus, quality improvement activities need to focus on orientation and planning delivery of healthcare, rather than focusing on crisis management.

The main conclusion and lesson drawn from this theme is that compliance with quality standards is *"conditional."* This means that services can only comply with standards if certain factors are in place. Literature supports the importance of compliance with quality standards. Compliance with quality standards is the reason why institutions compete to integrate quality improvement in their environment. In this study, RNs were knowledgeable about quality standards and their benefits in MMC service delivery. It is crucial for institutions to develop systems where RNs' concerns and ideas on quality improvement are heard and reflected in strategies that are aimed at improving quality.

5.2.2 Barriers to compliance

The second theme is related to barriers to compliance with quality standards. Barriers to compliance with standards include poor infrastructure, unavailability of resources (both material and human), and service providers' attitudes. The context of MMC service delivery revealed that compliance or non-compliance with MMC standards mostly related to individual and organizational issues, as stated above.

The barriers to compliance in this study are similar to those described in previous studies (Shah *et al.,* 2015:128; Megeus *et al.,* 2015:1; Oosthuizen & Van Deventer,

2010:1). Nevertheless, most studies focus on the factors that negatively influence compliance (Permana & Hidaya, 2018:235). The literature identified the main reasons why RNs do not fully comply with quality standards as cultural, economic, and social factors and a lack of knowledge (Efstathiou *et al.,* 2011:2). Furthermore, a lack of systematic quality evaluation, insufficient staffing, and organizational factors such as poor leadership also contributed to poor compliance to standards (Izumi, 2013:1; Oosthuizen & Van Deventer, 2010:1). Findings revealed that those in charge of MMC programmes seem not to have a collective view of the complexity of providing this service, others that curb the spread of HIV infections.

Although many factors have been associated with poor compliance with quality standards, human behavior emerged in a number of studies (Permana & Hidaya, 2018:240). Poor compliance with quality standards is sometimes linked to the RNs' attitudes. Registered nurses' attitudes towards their work can have a negative effect on clinical practice and the nursing profession. Similarly, MMC providers also stated that carelessness in one's work brought on by overconfidence in one's skills could lead to poor compliance with quality standards. Therefore, understanding psychology and human behavior can help individuals function effectively in a work environment (Andrew & Valeras, 2019:352).

The findings also revealed that barriers to compliance are influenced by the number of years that the providers have been providing MMC services. This trend has been documented in Efstathiou *et al.* (2011:6). These authors support the findings that the longer one is immersed in service delivery, the more the commitment towards compliance with standards declines. The results highlighted fatigue and burnout are prevalent among MMC providers. Providers experience periods of despair, frustration, anxiety, and a lack of motivation that affect their compliance with standards.

The main conclusions and lessons that can be learned from this theme are that ineffective leadership, high workload, and providers' attitudes are at the center of poor compliance to service standards at healthcare institutions. In order to ensure the safe and efficient execution of MMC procedures, it is essential to improve the quality of services continuously. Systemic barriers are preventing RNs from complying with standards, but still, MMC providers continue with service provision. It should not be

assumed that compliance with standards is something that comes naturally for nurses in a healthcare setting. On the contrary, managers should focus on the continuous development of systems that will enable staff to deliver quality services. It is clear that there is a discrepancy between theory and practice and between stakeholders.

5.2.3 Perceived enabling working environment

The last theme that emerged from the data analysis was the RNs' perceptions of an ideal environment that can facilitate compliance with standards. The findings highlighted that adequate human resources, supportive supervision, and training may enhance compliance with quality standards. Furthermore, participants mentioned that engaging in continuous quality improvements and site-level assessments do help with compliance. However, it is generally not possible to sustain these activities due to staff shortages. Megeus *et al*. (2015:6) echo the notion that onsite training, audit feedback and the use of reminders can bring about improvements in compliance with standards. The findings are similar to Permana and Hidaya (2018:240) views and Jennings *et al*. (2014:2), that the provision of knowledge and skills improve compliance with standards.

Conversely, in this study, participants mentioned that supportive supervision is not always active and usually focuses more on the gaps than the challenges at the site level. This type of supervision and management style affect RNs' compliance with MMC services. Compliance with standards may, therefore, require both clinical governance and the participation of RNs through practicing accountability. Interventions such as staff engagement in the planning and delivery of care, acknowledging their contributions, and feedback have improved morale and enhanced compliance with standards in other studies (Andrew & Valeras, 2019:352).

Conclusions and lessons learned from this theme are that building up a skilled team and retaining trained staff is critical to quality service delivery. Clinical audits, coupled with timely feedback, is a vital link between managers and staff. Registered nurses should understand the importance of implementing standards and guidelines while dealing with patients. Health authorities should structure systems in such a way that it

enhances the delivery of quality services. Monitoring compliance is critical in identifying and eliminating gaps while providing services. The interplay between various hospital organizational culture components, such as strong leadership, the culture of teamwork, adherence to organizational policies, and a commitment to constant quality assessments, can be done among MMC providers to create interventions aimed at improving compliance with standards.

5.3 CONCLUSIONS

The purpose of this study was to explore and describe the factors that are likely to increase RNs' compliance with quality standards at MMC sites in Lesotho. Three themes emerged from the analysis and were integrated into the existing literature, namely (1) knowledge of quality standards, (2) barriers to compliance, and (3) perceived enabling working environment. The ethical principles regarding respect for persons, beneficence, and justice were adhered to throughout the study.

This study's findings revealed that compliance with standards could be influenced by a variety of factors such as work dissatisfaction, burnout, lack of teamwork, poor communication among teams, and attitudes of RNs. The findings further revealed that ineffective systems, lack of systematic quality evaluation, insufficient staffing, and organizational factors such as poor leadership could lead to poor compliance with quality standards. The data that emerged from this study and other published literature shows that it is possible to address the quality of MMC using the Continuous Quality Improvement approach, supportive supervision, and providing continuous feedback. It is also important to note that other factors that influence compliance may be out of the practitioners' control. The study underscored the importance of compliance with quality standards at MMC sites, given that MMC is done for HIV prevention. Based on the results, it is concluded that the research question did yield the desired results.

5.4 RECOMMENDATIONS

This study's recommendations are based on the findings and the conclusions made (Botma *et al*., 2010:312).

5.4.1 Recommendations for nursing practice

- Managers should establish programs for continuous professional development, integrating the principles of quality improvement methods and evaluate its impact in the clinical practice.

- Performance-based incentives linked to results for better quality services and strengthening accountability are recommended to address barriers such as poor compliance with standards in healthcare service delivery.

- The establishment of a system in healthcare institutions to institute and sustain human resources that will meet the population's demands and needs for the provision of quality services.

- For the successful implementation of quality healthcare services, managers should be held accountable for providing quality healthcare. This includes conducting clinical audits and providing timely feedback to staff, staff involvement in clinical research, and the use of information to address gaps in the system.

- Registered nurses should take an active role in quality improvement activities in a healthcare setting and align nursing practice with professional values.

5.4.2 Recommendations for nursing education

- Quality improvement training should be incorporated into the registered nurses' curriculum to equip them with the necessary skills that will help them to deliver quality services as soon as they join the workforce.

5.5 FUTURE RESEARCH

- Conduct a quantitative study to obtain data on the factors that influence compliance with standards at all MMC sites in Lesotho

- Conduct qualitative studies regarding the views of the service receivers
- Triangulate findings to strengthen the analysis of the relationship between the set targets and compliance with quality standards
- Explore the complexity of designing and implementing MMC programmes for HIV prevention
- Conduct realistic evaluations after each intervention to see what works for whom under which circumstances

5.6 LIMITATIONS OF THE STUDY

The following were identified as limitations of this study:

1. The question about factors that influence compliance with quality standards was self-defined by the participants, and the findings were limited by the providers' personal understanding of the phenomenon.
2. While the study highlighted the factors that influence RNs' compliance with MMC standards, it covered views from RNs working in the country's lowlands. RNs in the mountainous and other parts of the country were omitted. The findings of the study might have been enriched by results from RNs across the country. The findings of this study cannot be generalized since it was a qualitative study.

3. The implementation of a research project at one's place of work has its own advantages. However, it may endanger the relationship between the researcher, participants as well as managers especially if the topic is sensitive like this one if not appropriately handled.

5.7 CHAPTER SUMMARY

This chapter presented the discussion of study findings based on the study themes. The factors that influence RNs' compliance with quality standards have been described. The results revealed that it is possible to achieve compliance with quality standards if healthcare systems are strengthened. The chapter also provided the study conclusions and provided recommendations and suggestions for future research. The recommended propositions were articulated based on the findings of the study.

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ANNEXURE A

Faculty of Health Science Research Ethics Committee

UNIVERSITY OF THE FREE STATE
UNIVERSITEIT VAN DIE VRYSTAAT
YUNIVESITHI YA FREISTATA

UFS·UV
HEALTH SCIENCES
GESONDHEIDSWETENSKAPPE

Health Sciences Research Ethics Committee

15-Jul-2019

Dear **Mrs Mamokete Ntsupa**

Ethics Clearance: **EXPLORING REGISTERED NURSES' COMPLIANCE TO STANDARDS FOR MEDICAL MALE CIRCUMCISION**

Principal Investigator: **Mrs Mamokete Ntsupa**

Department: **School of Nursing Department (Bloemfontein Campus)**

APPLICATION APPROVED

Please ensure that you read the whole document

With reference to your application for ethical clearance with the Faculty of Health Sciences, I am pleased to inform you on behalf of the Health Sciences Research Ethics Committee that you have been granted ethical clearance for your project.

Your ethical clearance number, to be used in all correspondence is:**UFS-HSD2019/0887/3007**

The ethical clearance number is valid for research conducted for one year from issuance. Should you require more time to complete this research, please apply for an extension.

We request that any changes that may take place during the course of your research project be submitted to the HSREC for approval to ensure we are kept up to date with your progress and any ethical implications that may arise. This includes any serious adverse events and/or termination of the study.

A progress report should be submitted within one year of approval, and annually for long term studies. A final report should be submitted at the completion of the study.

The HSREC functions in compliance with, but not limited to, the following documents and guidelines: The SA National Health Act. No. 61 of 2003; Ethics in Health Research: Principles, Structures and Processes (2015); SA GCP(2006); Declaration of Helsinki; The Belmont Report; The US Office of Human Research Protections 45 CFR 461 (for non-exempt research with human participants conducted or supported by the US Department of Health and Human Services- (HHS), 21 CFR 50, 21 CFR 56; CIOMS; ICH-GCP-E6 Sections 1-4; The International Conference on Harmonization and Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH Tripartite), Guidelines of the SA Medicines Control Council as well as Laws and Regulations with regard to the Control of Medicines, Constitution of the HSREC of the Faculty of Health Sciences.

For any questions or concerns, please feel free to contact HSREC Administration: 051-4017794/5 or email EthicsFHS@ufs.ac.za.

Thank you for submitting this proposal for ethical clearance and we wish you every success with your research.

Yours Sincerely

Dr. SM Le Grange
Chair : Health Sciences Research Ethics Committee

Health Sciences Research Ethics Committee
Office of the Dean: Health Sciences
T: +27 (0)51 401 7795/7794 | E: ethicsfhs@ufs.ac.za
IRB 00006240; REC 230408-011; IORG0005187; FWA00012784
Block D, Dean's Division, Room D104 | P.O. Box/Posbus 339 (Internal Post Box G40) | Bloemfontein 9300 | South Africa

ANNEXURE B

Ministry of Health Lesotho Ethics Committee

LESOTHO

Ministry of Health
P.O. Box 514
Maseru 100

REF: ID178-2019

Date: 06 June 2019

Category of Review:
[X] Initial Review
[ ] Continuing Annual Review
[ ] Amendment/Modification
[ ] Reactivation
[ ] Serious Adverse Event
[ ] Other _____

To
Mamokete Nts'upa,
University of the Free State
Faculty of Health Science

Dear Mrs. Nts'upa

RE: Exploring Registered Nurses Compliance to Standards for Medical Male Circumcision

This is to inform you that the Ministry of Health Research and Ethics Committee, after reviewing your proposal **APPROVED** the proposal and hereby authorizes you to continue the study according to the activities and population specified in the protocol. Departure from the approved protocol will constitute a breach of this permission.

This approval includes review of the following attachments;
[x] Protocol
[x] English Consent Form
[x] Sesotho consent forms
[x] Data collection form in English and Sesotho
[ ] Participant materials
[x] Other materials; The CV of the PI

This approval is **VALID** until 08 June, 2020.

Please note that an annual report and request for renewal, if applicable, must be submitted at least 6 weeks before the expiry date.

All serious adverse events associated with this study must be reported promptly to the MOH Research and Ethics Committee. Any modifications to the approved protocol or consent forms must be submitted to the committee prior to implementation of any changes.

We look forward to receiving your progress reports and a final report at the end of the study. If you have any questions, please contact the Research and Ethics Committee at tecmoh@gmail.com (or) 22276317.

Sincerely,

Dr. Nyane Letsie
Director General Health Services

Dr. Limpho Maile
Member of NH-REC

ANNEXURE C

Invitation to participate in a research study

Khubetsoana
P. O. Box 12580
Maseru

1st July 2019

Dear Participant

INVITATION TO PARTICIPATE IN THE RESEARCH STUDY

I, Mamokete Ntŝupa, am currently registered as a Masters' student at the University of the Free State. I would kindly like to invite you to participate in the research study. The title of the study is: *"Exploring Registered Nurses Compliance to quality standards for Medical Male Circumcision".* The study is conducted under the guidance and supervision of Mrs. M.R. Mpeli and Dr. L. Hugo both from the University of The Free State. The purpose of this study is to explore and describe the factors that are likely to increase Registered Nurses' compliance to quality standards at MMC sites in Lesotho. Based on the results, to recommend and implement strategies that are well focused, based on the problems identified.

The method of the study will be explained to you before giving your consent to participate. In order to describe these recommendations, I need to conduct a focus group interviews which will run for approximately one hour on a weekend when RNs are not on duty. There won't be any payment for participating in this study, participants will be reimbursed transport equivalent to the national fares. Strict ethical principles will be adhered to. This interviews will also be tape recorded with your permission for accuracy and to facilitate verbatim transcription of data. The researcher will not conduct the focus group interviews, an experienced interviewer will be recruited to ensure objectivity and to avoid partiality. Information related to the study will only be accessible to the researcher independent coder and supervisor of the study. All data

will be locked in a secure cupboard and will be destroyed two years after completion of the study. Your participation in the study is voluntary. You have the right to withdraw at any stage during the research process if you wish to do so without any penalty or repercussions. There is no envisaged risk by taking part in this study. Instead, benefits will emanate from the description of recommendations that will assist to facilitate compliance with quality standards. The findings of the study will be available on completion and will be communicated to you upon request.

If you have any questions about the study or about participating in this study, please contact Mamokete, on +266 5885 1331 / +266 630 764 28

Thank you for your participation, your time and input is highly valued. Should you agree to participate in the study, please sign below.

Signature……
Date……

Contact details of Health Science Research Ethics Committee at UFS: Phone +27 51 405 2812 for reporting any complaints or problems you have with the study.

Yours Faithfully

_____

Ms. M. Nts'upa
M.Sco.Sc Research Student (2016407633)
mamoketentsupa@gmail.com

ANNEXURE D

Letter to the Research Ethics Committee and MoH

Khubetsoana
P.O. Box 12580
Maseru, 100
Lesotho

22 April 2019

The chairperson: Health Sciences Research Ethics Committee
Dr SM le Grange
Block D, Room 104
Francois Retrief Building

P.O Box 339(G40)
Nelson Mandela Drive
Faculty of Health Sciences
University of the Free State
Bloemfontein
9300

Dear Sir/Madam

RE: APPLICATION FOR ETHICAL APPROVAL TO CONDUCT A STUDY ON EXPLORING REGISTERED NURSES COMPLIANCE TO QUALITY STANDARDS FOR MEDICAL MALE CIRCUMCISION

I am Mamokete Ntŝupa a student at the School of Nursing, Faculty of Health Sciences at the University of the Free State. I am currently undertaking a Master's degree in Social Science. I would like to request approval to conduct the study titled *"Exploring Registered Nurses Compliance to quality standards for Medical Male Circumcision".* The study is conducted under the guidance and supervision of Mrs. M.R. Mpeli and

Dr. L. Hugo both from the University of the Free State. The purpose of this study is to explore and describe the factors that are likely to increase RNS compliance to quality standards at MMC sites in Lesotho. Based on the results, to recommend and implement strategies that are well focused, based on the problems identified. Purposive sampling will be done to RNs who are providing MMC at the six MMC sites. Registered nurses at MMC sites that have one year or more providing MMC will be invited to participate.

An experienced facilitator will be recruited to facilitate the focus group interviews to ensure objectivity. The discussions will be held at a suitable venue conducive for group discussions. A set of questions will be developed to guide the discussion. Focus group discussions will be conducted in English and will run for approximately one hour. The interviews will be recorded with permission from participants for accuracy and verbatim. Analysis and reporting of data collected will not identify participants in any form. All measures to maintain confidentiality of participants will be observed. There is no envisaged risk by taking part in this study. The exploration and description of RNs non-compliance will form basis for the description of recommendations to facilitate compliance with quality standards at MMC sites.

I would greatly appreciate your approval to perform the study after your review of the proposal. Any recommendations or suggestions will be welcomed.

Thank you very much.

Yours Faithfully,

_____

Mamokete Nts'upa

Student number: 2016407633

mamoketentsupa@gmail.com

ANNEXURE E

Consent form to use audio-tape recorder during data collection

I have read and understood the information in this letter requesting my consent to participate in a research project titled: *"Exploring Registered Nurses compliance to standards for Medical Male Circumcision"* I therefore attach my signature to show my willingness to voluntarily participate in the abovementioned study.

Signed ……on this day of …...2019

Thanking you in advance

Facilitator's signature……..

ANNEXURE F

Consent for use of audio-tape recordered

I have read and understood the information in this letter requesting my consent for the use of audio-tape recorder. The title of the study: *"Exploring Registered Nurses compliance to standards for Medical Male Circumcision".* I therefore attach my signature as a sign of my willingness to voluntarily participate in the abovementioned study and grant my permission that the interview be recorded.

Signed ……on this day of …...2019

Thanking you in advance

Facilitator's signature……

ANNEXURE G

Focus group interview guide

The purpose of this study is to describe the factors that influence RNs' compliance with quality standards at MMC sites in Lesotho.

1. **RNS understanding of quality standards:**
   - *What do you understand by the term 'MMC quality standards'?*
   - *Please explain some/any standards that you know, that RNs must adhere to at MMC sites.*
   - *Why is it important for RNs to comply to these standards?*
   - *Do RNs know when they are complying or not complying to quality standards of MMC as they work? How do they know?*

2. **Supervision of compliance to quality standards at MMC sites**
   - *When are quality checks of standards usually done at MMC sites? Why do you think they are done at that time?*
   - *Who is responsible for ensuring RNs comply with quality standards at MMC sites? Why is this so?*
   - *What is the importance of supervision in ensuring compliance to quality standards at MMC sites?*
   - *What problems can be caused by poor supervision?*

3. **Consequences of compliance to quality standards**
   - *What are the positive results of RNs' compliance to MMC quality standards in MC service provision?*
   - *What are the negative results that are brought by RNs' non-adherence to quality standards at MMC sites?*

4. **Factors hindering compliance to quality standards at MMC sites**
   - *What are some of the things that prevent RNS from complying with quality standards at MMC sites?*
   - *What are some of the things that enable RNS to comply with quality standards at MMC sites?*

5. **Strategies to enhance compliance to quality standards at MMC sites**
   - *Generally, what can be done to increase RNS compliance to quality standards at MMC sites in Lesotho?*
   - *Specifically, what can be done to enhance RNS compliance to quality standards at MMC sites where you are working?*

ANNEXURE H

Letter from the editor

To whom it may concern

This is to state that the Master's thesis titled **EXPLORING REGISTERED NURSES' COMPLIANCE TO STANDARDS FOR MEDICAL MALE CIRCUMCISION** by Mamokete Nts'upa has been language edited by me, according to the tenets of academic discourse.

Annamarie du Preez
B.Bibl.; B.A. Hons. (English)
16-11-2020