PERCIEVED PERCEPTIONS OF REGISTERED NURSES ON TASK-SHIFTING OF MALE CIRCUMCISION IN PUBLIC HEALTH FACILITIES IN THE KHOMAS REGION OF NAMIBIA

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ESTER NDAZILEPO MWANYANGAPO

200251287

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SUPERVISOR: DR E. KAMENYE (UNIVERSITY OF NAMIBIA)

ABSTRACT

Task-shifting in the context of Voluntary Medical Male Circumcision (VMMC) refers to enabling well-trained clinical personnel who are not Medical doctors to perform all steps of the male circumcision procedure. Since 2009, over 200 000 Voluntary Medical Male Circumcision surgical procedures have been performed throughout Namibia. This performance has been achieved against a backdrop of scarce human resources thus various options have been explored such as task-shifting to increase access to safe VMMC. Since the introduction of male circumcision task-shifting in the Khomas region, little is known about the perceived perceptions of nurses regarding male circumcision task-shifting. Therefore, the purpose of this study was to explore and describe the perceived perceptions of registered nurses on task-shifting of male circumcision in public health facilities in the Khomas Region of Namibia. A qualitative, explorative, descriptive and contextual design was conducted, using individual in-depth interviews to gather data from 14 registered nurses in Katutura Health Centre, of the Khomas region. Data analysis was done using Tesch's method. The results showed that registered nurses have good and positive perceived perceptions of task-shifting of male circumcision. The study revealed that through task-shifting, nurses are now equipped with special skills, and knowledge that was not part of their scope of practice initially. The study also revealed that because of male circumcision task-shifting, there is limited backlog for patients in need of circumcision services. Recommendations based on this study's findings include: that the Ministry of Health should provide continuous training and refresher training for the nurses so they gain more skills and knowledge and improve where they can, for continuous provision of exceptional services to the clients.

Keywords:Task-shifting,Male Circumcision,Perceived, Perceptions, Registered nurse.

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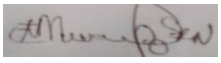
LIST OF ABBREVIATIONS AND ACRONYMS

AE	Adverse Events
AIDS	Acquired Immune Deficiency Syndrome
ART	Antiretroviral Therapy
HCWs	Health Care Workers
HIV	Human Immunodeficiency Virus
MC	Male Circumcision
MHSSMCP	Ministry of Health and Social Service Male Circumcision Policy
MoHSS	Ministry of Health and Social Services
NPC	Non-Physician Clinician
SOP	Scopes of Practice
TSDP	Task-shifting Demonstration Project
WHO	World Health Organisation
VMMC	Voluntary Medical Male Circumcision

DECLARATIONS

I, Ester Ndazilepo Mwanyangapo, hereby declares that “Perceived Perceptions of Registered nurses on task- shifting of Male circumcision in public health facilities in Khomas region, Namibia” is a true reflection of my study and has not been submitted for any degree at any other university.

Ester Ndazilepo Mwanyangapo:…  ……**Date:**October 2024

DEDICATION

I dedicate this thesis to my parents, my late Daddy Mr Albert Aikali Mwanyangapo and My beloved Mom Mrs -Veronika Munghwetele- Mwanyangapo. Daddy your motivation remains in my heart forever as you always tell me to never give up but to always strive for the best in life. I also dedicate this to my husband Oskar Elago who made it possible by reminding me every time to do my research while he was taking the responsibilities of other chores.

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CHAPTER 1

INTRODUCTION AND BACKGROUND OF THE STUDY

1.1 INTRODUCTION

Task-shifting involves the strategic redistribution of tasks among health workforce teams and personnel. Specific tasks are moved, shared or delegated, usually from highly trained healthcare workers (HCWs) to those with shorter training or less qualifications, including lay people (Auvert *et al.,* 2016). According to (WHO 2015), task shifting involves the rational redistribution of tasks among health workforce teams.

According to Stegman *et al.* (2019), task-shifting has also been proposed as a way to expand surgical capacity, particularly in resource-limited settings. Task-shifting has been promoted by the World Health Organisation (WHO) as a potential solution to expanding medical male circumcision services (WHO, 2015). The effect of Male circumcision (MC) as a protective measure against infection with the Human Immunodeficiency Virus (HIV) has been strongly supported by evidence derived from randomised trials and observational studies (Sgaeir *et al.,* 2014). Mathematical models ran globally, estimated that widespread male circumcision in Africa could prevent up to 6 million new HIV infections and 3 million deaths in the next two decades (UNAIDS, 2019).

Consequently, WHO promoted medical male circumcision as a prevention intervention and has issued several guidelines to support the scaling up of male circumcision services (Auvert *et al.,* 2016). High HIV prevalence countries in eastern and southern Africa,

have reported a lack of human resources as one of the most important limitations to scaling up medical male circumcision.

Since 2009, over 200, 000 Voluntary Medical Male Circumcision (VMMC) surgical procedures have been performed throughout Namibia. This performance has been achieved against a backdrop of scarce human resources, thus various options have been explored such as task-shifting and task sharing to increase access to safe VMMC (Ministry of Health and Social Services, 2020). Insufficient documented literature exists on the perceived perceptions of registered nurses regarding the task-shifting of male circumcision in public health facilities in the Khomas region of Namibia. Most available literature either concentrates on task shifting in the northern regions of the country or emphasizes task sharing, with limited explicit focus on male circumcision. Additionally, existing literature primarily addresses task shifting related to HIV/AIDS rather than the specific context of male circumcision. Therefore, there is a need to direct attention towards understanding the perceived perceptions of registered nurses regarding the task-shifting of male circumcision in public health facilities in the Khomas region of Namibia.

1.2 BACKGROUND OF THE STUDY

Globally, task-shifting has been used to address numerous types of health worker shortages (Baine & Kasangaki, 2014). According to Ferrinho *et al.* (2014) the scarcity of well-trained health workers is a global issue that is particularly acute in low and middle-income countries. Therefore, WHO in 2019 issued global guidelines and recommendations to assist countries in task-shifting implementation (WHO, 2016).

Countries were urged to embrace task-shifting as a public health initiative, creating an enabling regulatory environment for implementation, ensuring quality of care, ensuring sustainability, and organising clinical care services (WHO, 2016). From a global perspective, task-shifting has been successfully employed generally in HIV care and particularly antiretro viral therapies as well as for male circumcision (Baine & Kasangaki, 2014)

Many countries have since implemented task-shifting with most of the European countries such as New Zealand, Canada and Belgium still tasking it to Medical doctors. A study done by Crowley and Meyers, (2015) has attributed the successful implementation of the VMMC program to the task-shifting policy.

In Africa, task-shifting has been successfully implemented in many areas of health care, most specifically in Obstetrics and Gynaecological surgeries, with respect to caesarean sections. African countries, such as Kenya, Zimbabwe and South Africa have effectively implemented task-shifting in male circumcision programs from the physician to registered nurses**.** A study done in Kenya by Curran (20l2), found that the successful implementation of the VMMC program was attributed to the implementation of the

task-shifting policy. However, in Zimbabwe, physicians reported experiencing feelings of infringement in their role within the health delivery system because of delegating their responsibilities to nurses. At the same time, nurses perceived task-shifting as adding to the burden of their profession without financial compensation (Linnea *et al.,* 2012). In South Africa, male circumcision is still exclusively performed by Medical doctors, while in Kenya and Tanzania male circumcision is shifted to clinical officers and nurses, and they perceive it as a good move because they gained a special skill.

In Namibia male circumcision has been historically performed by Medical doctors assisted by nurses but there has been an acute shortage of human resources to support public health and more specifically circumcision (MoHSS, 2012). Many health care settings have used task-shifting with nurses in Namibia performing a variety of tasks that were previously the responsibility of Medical doctors. As a result, task-shifting was conceived as a system for efficiently and effectively utilising the existing health workforce to deliver the desired health services (Chu *et al.,* 2012).

In 2009, the Ministry of Health and Social Services (MoHSS), implemented the Task-Shifting Demonstration Project (TSDP) for voluntary medical male circumcision to assess the feasibility of a task-shifting approach of male circumcision from Medical doctors to nurses. In order to reach a saturation of 80% MC coverage, the task-shifting was intensified (Ministry of Health and Social Services, 2012). In 2017, the Ministry of health and Social Services fully implemented task-shifting of male circumcision in public health facilities, in order to manage the gap in human resources so as to clear the backlog in public health facilities and reach out to more people and meet the set target of Task-shifting has been recommended by WHO as a strategy to curb the effects of

shortage of skilled personnel to provide the ART care and to enhance accelerated rolling out of ART services [29]. As in most resource poor settings where task-shifting is practiced in ART care [30,31], the strategy was effective in this setting during the pandemic as it allowed for staff schedules to be restructured and reduced the waiting time (MoHSS, 2020). The program has been successfully introduced on a static and outreach basis in the Khomas, Karas, Kavango East, Kavango West, Hardap, Oshana, Ohangwena, Omusati, Oshikoto and Zambezi regions (MoHSS, 2020). Task-shifting has been recommended by WHO as a strategy to curb the effects of shortage of skilled personnel to provide the care and to enhance accelerated rolling out of medical services. As in most resource poor settings where task-shifting is practiced, the strategy was effective during the pandemic as it allowed for staff schedules to be restructured and reduced the waiting time.

There have been mixed feelings from nurses from other countries. In Mozambique, nurses involved in the task shifting, reported that nurses task shifting create the feeling of autonomy, empowerment and of 'speaking the same language' as the doctors, however some indicated that, there are still mixed reactions regarding the capacity and willingness of nurses to play a more active role in decision-making.

It is therefore against this background that when task-shifting was implemented it triggered unknown perceived perceptions and reactions which this study sought to unravel.

1.3 STATEMENT OF THE PROBLEM

The health sector in Namibia is characterised by the low human resources, particularly Medical doctors in terms of both numbers and skills, resulting in a failure to effectively meet the Namibian population's health needs ((Ferrinho *et al.,* 2014). Currently, about 82% of the Namibian population relies on public healthcare facilities, and the patient-to-nurse/midwife ratio reported by the World Bank in 2018 was only two nurses/midwives per 1 000 patients, a decline from 2,9 in 2007/8, despite a growing population. Additionally, there is a massive shortage of medical specialists in the country, with one doctor per 1000 patients. Moreover, task-shifting has been promoted by the WHO to support expansion of HIV/AIDS treatment and care (WHO/UNAIDS, 2019).

However, task-shifting is not a new practice in Namibia as it has been practised albeit on a smaller scale, hence there is little to no document evidence of it. However, the introduction of task-shifting regarding VMMC in the Namibian healthcare system to male circumcision increased patient access by 60% while reducing the associated costs (MoHSS, 2017). The emergence of nurses as the primary providers of VMMC has been a crucial innovation in the program’s success to date. Broadly, task-shifting has demonstrated the potential of nurses to meet crucial minor surgical needs in resource-limited health care settings at an unprecedented scale.

However, two key challenges remain. Firstly, millions of VMMCs are needed in the future to achieve and maintain the current WHO coverage targets of 80% among adult men by 2030 (UNAIDS, 2019). Yet, not every country implementing VMMC has

adopted task sharing, amidst anecdotal concerns over surgical safety and nursing shortages. Secondly, national policies governing task sharing and nurses' scopes of practice (SOP) are not always clear or consistent across governmental agencies and regulatory bodies, hence a perceived perception is created that, it's a form of task dumping which is not associated with proper financial reward (WHO, 2016). According to the MoHSS (2020) the current VMMC target for 2020/2021 for the Khomas region stands at 5350 male circumcision cases to be performed by registered nurses translating to 446 circumcision cases per month. The same providers can achieve this via both static service and outreach services to other clinics in the Khomas region. The recommended nurse to patient ratio for male circumcision surgical procedure is 1:5 (MoHSS, 2020). The researcher, as a nurse who is also performing male circumcision has observed that nurses seems to be overwhelmed by their workload and the additional tasks have been received with a grin. The sentiments of the researcher were similar to those found by Okyere *et al.* (2017) where the author indicates that in Ghana, healthcare workers were doing tasks that were above their level of training and job descriptions.

Generally, task shifting is a good practice as specific tasks are delegated, where appropriate, from highly qualified health workers to those with shorter training and fewer qualifications. This approach helps to make more efficient use of available human resources for health, thereby alleviating the burden of the workload.

However, a significant challenge arises from the fact that the sharing of responsibilities does not come with financial compensation. This lack of financial incentive makes it very difficult for health workers to fully commit to task shifting.

Since the introduction of male circumcision, task-shifting in the Khomas region, little is known about the perceived perceptions of nurses regarding task-shifting of male circumcision. Therefore, this study aims to answer to the following question: What are the perceived perceptions of registered nurses regarding the task-shifting of male circumcision?

1.4 PURPOSE OF THE STUDY

The purpose of the study was to explore the perceived perceptions of registered nurses on task-shifting of male circumcision in public health facilities in the Khomas region of Namibia.

1.4.1 OBJECTIVES OF THE STUDY

Given the importance of task-shifting in reducing long waiting periods in public health facilities, this study sought to address the following objectives:

- To explore the perceived perceptions of registered nurses on task-shifting of male circumcision in public health facilities in the Khomas region.
- To describe the perceived perceptions of registered nurses on task-shifting of male circumcision in public health facilities in the Khomas region.

1.5 SIGNIFICANCE OF THE STUDY

This study is of great importance since the findings from this study may assist the policy makers in instigating the necessary support for nurses involved in the provision of male circumcision in the Khomas region and in turn ultimately improve the quality of patient-care provided. Furthermore, the outcomes of this study can be vital in developing a structure that leads to the effective utilisation of human resources with regards to task-

shifting of voluntary medical male circumcision in the region. In addition, the findings and suggestions of this study may also contribute to and benefit academics who may be interested in task-shifting as well as male circumcision. Moreover, the study can be used as a reference study for further studies.

1.6 DESCRIPTION OF THE STUDY SETTING

Holloway and Wheeler (2012) emphasised that the study setting is the physical location of the research. The study was conducted at the Katutura Health centre in Namibia in the board roam, in the Khomas region. Katutura health centre is a state-owned health centre located in Katutura, Windhoek, Khomas region. The Katutura health centre has a capacity of 32 registered nurses.

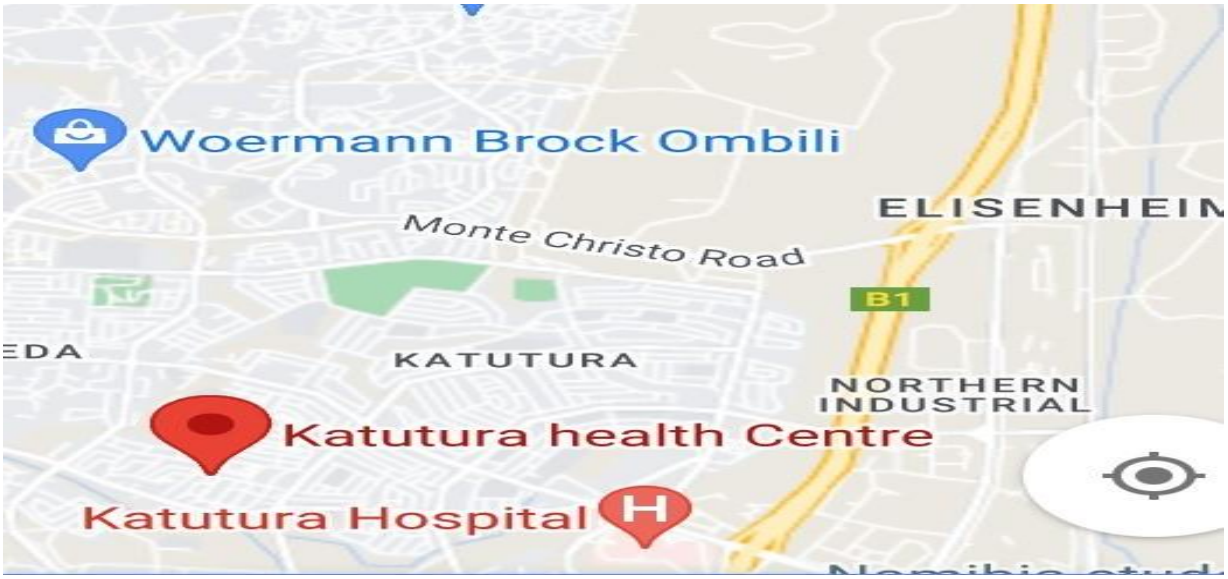

Figure 1.1. Katutura Health Centre

Source: Google Maps (accessed from: https://www.google.com/urlkhomas-

Figure 1 shows the location of the Katutura health centre, Khomas region, Namibia.

1.7 PARADIGMATIC PERSPECTIVE

Studies of this nature require a paradigmatic perspective, which is a collection of logically linked concepts and propositions that provide a theoretical perspective or orientation that tends to guide the research approach to a specific direction. This study was guided by the interpretivist paradigmatic perspective which explains the expression of the thoughts of its author, and also states that interpreters must attempt to put themselves within the perceived perception or thinking pattern of the author in order to reconstruct the intended meaning of the text.

The following assumptions were applied to the study:

1.7.1 Ontology Assumptions

With Ontology there is one defined reality that must be fixed, measurable, and observable. Ontology's assumptions (knowledge) and genuine knowledge is objective and quantifiable. This assumption applies to this study as it deals with reality and knowledge. Hence it was important for the researcher to understand the reality regarding the perceived perceptions of registered nurses on task-shifting of male circumcision.

1.7.2 Axiology Assumptions

Axiology assumption involve the roles and values of the researcher. Here the researcher's subjective values, intuition, and biases are important, they play a role in the dialog of social construction and inform his or her interpretation of the data. This assumption was applied when the researcher explained her own observations.

1.7.3 Epistemological Assumptions

Epistemological assumption mean that researchers try to get as close as possible to the participants being studied. Therefore, subjective evidence is assembled based on individual views and this is how knowledge is known through the subjective experiences of people. In this study, the epistemology was used to provide a framework for predicting, describing, empowering, and deconstructing population-specific worldviews. Thus, increasing the base of knowledge that leads to enhanced understanding of the purpose behind this research.

1.7.4 Methodological assumptions

Methodological assumptions consist of the assumptions made by the researcher regarding the methods used in the process of qualitative research (Creswell, 2014). The procedures used by the researcher were inductive and based on the researcher's own experience in collecting and analysing data. The research here is the product of the values of the researcher. Through an inductive approach, raw textual data is condensed into a brief, summary format. Clear links were established between research objectives and summary findings derived from raw data. A framework of the underlying structure of experiences or processes that were evident from the raw data was developed.

In adopting this approach, the research questions changed whilst the study was underway, in order for the research problem to be better understood. Hence, the data collection strategy had to be modified to accommodate new questions. The researcher analysed the data to develop an in-depth knowledge about the topic under consideration.

The main question addressed by these assumptions was: What is the process of research? Here, the researcher used an inductive logic, studied the topic within its context, and employed the emerging framework or model. The researcher worked with the details and specific information before generalising. Furthermore, the researcher described the context of the study in greater detail. Through the experiences that the researcher gained from the field, the research questions were continually revised (Cresswell 2014).

1.8 THEORETICAL FRAMEWORK

This study was based on the Rogers Change theory, which was developed in 1962. The theory is concerned with a dynamic balance of forces working in opposing directions (Rogers, 1980). In this study, the situation at hand is the task-shifting of male circumcision form Medical doctors to registered nurses. This framework fits this study, as it explored the perceived perceptions of nurses regarding the situation at hand, which is task-shifting of male circumcision. This theory also applies to long-term change projects. It is successful when nurses who ignored the proposed change earlier adopt it because of what they hear from nurses who adopted it initially (Rogers, 1980).

The Rogers Change Theory has three major concepts: driving forces, restraining forces, and equilibrium. The Rogers change theory is more applicable to this study because it tries to analyse why some people are more willing to accept change than others. The Rogers change theory explains why certain health professionals are resilient to change while others are supporting the ideas of task-shifting. Rogers also alluded to factors contributing to the resilience and acceptance of task-shifting in the health fraternity (see

chapter 3 for detailed application of the Rogers theoretical framework when discussing the results of this study).

1.9 DEFINITIONS OF CONCEPTS

Perception: Is defined as the way in which something is regarded, understood, or interpreted. For this study, it is looking into how the registered nurses viewed the shifting of the male circumcision task from Medical doctors to nurses.

Registered nurse: A graduate trained nurse who has been licensed by a state authority after qualifying for registration. A registered nurse in the Namibian context has **completed** a 4 years diploma in Comprehensive Nursing /3 years diploma in Nursing/ 4 years bachelor in Nursing Science.

For this study, a registered nurse is a professional nurse who performs the male circumcision procedure and/or conducts assessment and reviews on male circumcision clients. The nurse also ought to be registered by the Health Professions Council of Namibia according to the Nursing Act No 4 of 2004.

Task-shifting: is defined as the planned delegation of tasks, which are in the domain of a physician's role to non-physicians. For this study, task-shifting is referred to male circumcision tasks being moved, from Medical doctors to registered nurses in public health facilities.

Male circumcision: Is defined as the removal of the foreskin or the fold that covers the penis gland (MoHSS, 2012).

1.10 THE STRUCTURE OF THE THESIS

This thesis is divided into the following chapters:

Chapter 1: Introduction and Background of the study

Chapter 2: Research design and Methodology

Chapter 3: Findings and Literature Control

Chapter 4: Conclusions, Limitations and Recommendations

1.11 SUMMARY

This chapter presented the background of the study, the statement of problems, purpose of the study, objectives of the study, significance of the study, and the definitions of terms. Paradigmatic perspective, theoretical framework were also discussed. The next chapter looked at the research design and methodology.

CHAPTER 2

RESEARCH DESIGN AND METHODOLOGY

2.1 INTRODUCTION

This Chapter provides a narration of the design and methodology that was used in the study. All methodologies used are analysed. The method of data collection and data analysis on perceived perceptions of nurses on task-shifting of male circumcision in Katutura are also explained in more detail.

2.2 RESEARCH DESIGN

Asenahabi (2019) defines research design as the overall plan for connecting the conceptual research problems to the relevant and achievable empirical research. Moreover, it provides the direction for the procedure that the researcher must undertake to fulfil the research's aims and objectives. This study employed a qualitative method. It also applied a descriptive, exploratory, and contextual approach, to achieve the objectives of the study. Exploratory, contextual and descriptive design was used to formulate a greater understanding of a previously un-researched topic and satisfies the researcher uncovers facts and brings new issues to light.

2.2.1 Qualitative method

According to Asenahabi (2019) qualitative research focuses on exploring and understanding the meanings which individuals ascribe to a social phenomenon. The data derived from a qualitative method cannot be quantified nor generalised. Rather, the

approach is useful in enabling the researcher to understand the phenomenon under investigation, with regards to the perceived perceptions and experiences of the research participants. Additionally, qualitative research seeks to gain an in-depth understanding of individual experiences as it provides an in-depth understanding of the issues at stake.

2.2.2 Descriptive design

A descriptive design involves the collection of data that describes the 'who, what, and where of a phenomenon from a subjective perspective. The approach is well aligned with the interpretative paradigm. This is because, the philosophical perspective represents the understanding that, reality exists within various contexts. It is important to take into consideration the fact that one phenomenon can be perceived differently by various individuals, hence the need to take a descriptive approach (Doyle *et al.,* 2020). Furthermore, descriptive designs aim at describing the dimensions, variations and importance of phenomena resulting in thicker descriptions (Polit & Beck 2015).

2.2.3 Exploratory design

According to Bryman (2018) an exploratory approach is undertaken when there is very little information about a phenomenon. The study made use of the exploratory approach as it enabled the researcher to determine the nature of the problem, and provide a better understanding of the perceived perceptions of registered nurses on task-shifting of male circumcision.

2.2.4 Contextual design

A contextual approach was defined by Duda *et al.* (2020) as an approach that makes use of semi-structured interviews to obtain information about the context of the phenomenon under investigation. In this approach, participants were asked a central question regarding their perceived perceptions in the male circumcision task-shifting and were observed in their working environment, where they were most comfortable in. The approach was applied to this study as it enables the researcher to assess how registered nurses perform male circumcision and the service that are provided to patients. In this study, the research was done in the context of Katutura Health centre. The findings are understood only within the context of nurses who perform male circumcision and do assessment of clients going through male circumcision in public health facilities in the Khomas region.

2.3 RESEARCH METHODS

The researcher used the qualitative method. In this study, the selection of the research method was based on the phenomenon under investigation and the purpose of the study. The following methods and procedures were used by the researcher to obtain the information regarding the perceived perceptions of nurses on male circumcision task-shifting from Medical doctors to nurses in public health facilities.

2.3.1 Population

Creswell (2019) states that population is a group of individuals who had the same characteristic. The population of this proposed study was comprised of registered nurses

at the Katutura health centre who were involved in Voluntary Medical Male Circumcision (VMMC) in the Khomas region, Windhoek. The Katutura Health Centre has a total of 32 registered nurses. (MoHSS, 2020). The target population was all Registered nurses at Katutura Health centre. The Study population was registered nurses involved in male circumcision.

2.3.2 Sampling and Sample

Sampling in research refers to the process of selecting a subset of individuals or elements from a larger population to study and make inferences about the entire population. The purpose of sampling is to gather information and draw conclusions more efficiently and cost-effectively than if the entire population were studied (Burn 2016). The sampling method that was used in this study was purposive sampling. Purposive sampling is a non-probability sampling method, where participants are chosen on the basis of their ability to provide information that is required to answer the research objectives (Benoot *et al.,* 2016). Hence the registered nurses were selected because they deal with male circumcision procedures, carry out surgery or do reviews and assessment for male circumcision clients and can provide the necessary information regarding perceived perceptions of registered nurses on task-shifting of male circumcision to address the research objectives comprehensively with substantiated evidence.

According to Burns and Grove (2019) a sample size is determined by the scope of the study, nature of topic, quality of data and study design. Furthermore, the number of participants was determined by participants' sufficiency and information saturation (De Vos *et al.,* 2012). The study had a sample of fourteen (14) registered nurses, who

participated in the study. Saturation and sufficiency was reached when participants were giving the same answers and no new information was obtained. Saturation was first observed at interview 13, then interview 14 was done as a confirmatory. Hence the saturation at 14.

Inclusion criteria

The following inclusion criteria applied to the study: for one to be included in the study a participant must be:

- A registered nurse at the Katutura Health Centre
- Conduct male circumcision surgery
- Conduct reviews and assessment for male circumcision clients
- Have worked at the Katutura Health Centre for at least one year

Exclusion criteria

- Registered nurses at other healthcare centres in Windhoek

2.3.3 Data Collection

Data collection is defined by Barrett and Twycross (2018) as the process of gathering and measuring information on variables of interest, in an established systematic fashion that enables one to answer stated research questions, test hypotheses and evaluate outcomes. According to Barret and Twycross (2018) under a qualitative research approach, data may be collected using interviews, focus discussion groups or observations. This study made use of individual face-to-face in-depth interviews to

collect data in order to gain more insight on the perceived perceptions of registered nurses on task-shifting of male circumcision.

Barret and Twycross (2018) further highlighted the ability of interviews in providing a direct and straightforward approach in gathering detailed and rich data regarding a particular phenomenon. Moreover, individual face to face in depth interviews have the added advantage of allowing flexibility for participants to freely be themselves and give their honest perspective on the phenomenon under investigation.

2.3.4 Data Collection Procedure

The following procedures were followed to gather information from the participants. The researcher obtained an ethical clearance certificate to undertake the study from the University of Namibia's Research Ethics Committee (see Appendix A). The researcher also requested and successfully received permission, in the form of a permission letter from the Ministry of Health and Social Services' Ethics Committee to conduct the study in a public health facility (see Appendix B). Furthermore, the researcher sought and obtained a permission letter from the Office of Regional Director, under the auspices of the MoHSS to allow the researcher to carry out the study in the Khomas region (see Appendix C). The researcher set up appointments with the participants in the boardroom of the Katutura Health Centre to explain the purpose of the study and to request for their consent to participate in the study.

Before the start of the interviews, the boardroom was prepared by ensuring that it was well lit and ventilated to put the participants at ease. Participants were given approximately 30-45 minutes to read and understand the questions and decide if they

still wanted to continue with the interviews. At the start of the interview, the researcher introduced herself and again explained the purpose of the interview and the study. Moreover, permission to record the interviews was also requested from the participants and upon agreement, the participants signed a consent form (see Appendix D). Before starting the interview, the researcher asked a series of ice-breaking questions to put the participants at ease and to relinquish any feelings of anxiety. The in-depth interviews were conducted on an individual basis, face to face. Each interview was completed within a 30-45-minute timeframe, which proved to be sufficient. Participants expressed understanding of the questions and found them easy to answer. In fact, most participants concluded their interviews before the allotted 30-minute duration. The interviews were conducted in the medium of instruction, which is English. At the start of the interview, the responses were recorded on a digital audio recorder, however, hand written notes were also taken on a notepad. The audio recordings were subsequently transcribed and kept in a safe locked drawer.

2.3.5 Data Collection Instruments

For the researcher to be able to conduct the research, appropriate instruments must be used to achieve the intended objectives. Leedy and Ormrod (2014) referred to these instruments as tools and further defined them as specific mechanisms or strategies used by the researcher to collect, manipulate, or interpret data. In this study, data was collected using an interview guide with a central question regarding the topic of the study and probing questions to gain a deeper understanding regarding the perceived perceptions of registered nurses on male circumcision task-shifting (see Appendix E). Another advantage of using individual face-to-face interviews, is that they allow the

researcher to explain difficult questions and equally accords the participant an opportunity to request further clarity (Adams, 2015). An audio recorder and field notes were also used as instruments to collect data, to record rich and informative information, which was accurately transcribed.

2.3.6 Measures to ensure Trustworthiness of the study

Trustworthiness of the study refers to the degree of confidence that qualitative researchers have in the study, East et al (2014). To ensure trustworthiness of this study, the researcher attempted to portray the perceived perceptions of registered nurses on task- shifting of male circumcision and made a judgement by using the following best alternative terms suggested by to define trustworthiness as proposed by (Densin 2015): credibility, dependability, transparency and confirmability. It is essential for all approaches to research to demonstrate quality with regards to the research process and data collection.

Credibility: refers to whether participant's percieved perception match up with the researcher's portrayal of the theme (Bloomberg & Volpe, 2013). It also refers to the truth and interpretation of the data (Brink, Van der Walt & Van Rensburg, 2012). For this study, voice recordings; field notes and verbatim transcriptions, aided in ensuring credibility (Streubert & Carpenter, 2014). Moreover, the study collected data until the point of data saturation was reached, and participant's responses were recorded (Rubin & Babbie, 2021). Member checking was done whereby the researcher shared the findings with the participants to verify accuracy and make sure that the researcher did not miss any information.

Dependability: Dependability includes the aspect of consistency; the researcher needs to check that the analysis of the study is in line with the accepted standard for a particular design. In this study dependability was ensured through a logical, well documented report (De Vos *et al.* 2021). An inquiring audit was done by the researcher's supervisor. The aim was to examine both the process and product of the inquiry and to determine the trustworthiness of the findings (Korstjens & Moser 2017). This was ensured by the researcher's supervisor checking the researcher's data, interpretations and findings. In addition, a review of literature was also conducted to search for similar studies and the resultant findings.

Transferability: Refers to whether research findings can be transferred from a specific situation or case to another (De vos et al 2021). It is about how well the study has made it possible for readers to decide whether similar processes will be applicable in their settings and communities by understanding in-depth how they occur at the research site (Bloomberg & Volpe,2013).

Transferability was ensured by the researcher providing comprehensive description of the participants and the process of this research in order to enable the researcher to assess whether the findings of the study are transferable to their own setting. Also, In this study, data were collected until saturation was reached and participant's own responses and words were used to illustrate the various real-life views across the range of answers given (Bradshaw *et al.,* 2017).

Confirmability: Refers to the degree to which the findings are the products of the focus of inquiry and not of the biases of the researcher (Babbie & Mouton, 2019). It requires

one to show the manner in which interpretations have been arrived at. (Polit & Beck, 2015).

In this study confirmability was ensured by searching for relevant literature to support the study findings. Moreover, confirmability was ensured by the supervisor confirming the findings of the study in an effort to remove the researcher's own opinions and to focus directly on the data Confirmability was further ensured by the researcher discussing the research process with the supervisor.

2.3.7 Pilot Study

Piloting is a small-scale methodology test, intended to ensure that proposed methods and procedures will work in practice before being applied in a large investigation (Bertram, 2014). According to Bless *et al.* (2013) pilot studies are a vital part of research as they test for the feasibility, convenience and cost-effectiveness of the study and its research questions. Furthermore, by conducting a pilot study prior to the main study, it assists in assessing the reliability and validity of the interview guide; testing the suitability of the interview schedule; ensuring that questions were clear and free from ambiguity, bias, and misunderstanding between the participants and the researcher (De Vos *et al.,* 2012). A pilot interview was conducted with five (5) registered nurses from Katutura Health Centre.Results were not included because the aim was to check the validity of the instrument and rectify some verbs for easy understanding.

2.4 DATA ANALYSIS

Data analysis, according to Brayman (2018) is the process of inspecting, cleansing, transforming and modelling data in order to highlight useful information, suggest conclusions and support decision making. Similarly, Leedy and Ormrod (2014) stated that the value of all scientific findings is heavily dependent on how data is collected and analysed. To analyse data in a research study, key characteristics during data analysis in interpretative research are the generation of high-quality, meaningful and relevant data, which allows valuable insights to merge within a social context (Brayman, 2018). Content analysis coding frame work was used. According to Elo and Kyngas (2007) content analysis is a systematic, replicable technique for compressing many words of text into fewer content categories.

Before the data could be analysed, it had to be transcribed from audio recordings to written format. According to Rahman (2017) transcription is the process of converting recorded words into text. The process entails listening to the recordings and jotting down what was said, text by text. In this study, the Tesch's method was used, which is a technique used to analyse transcribed textual data in order to comprehend the meaning of the text, action, or narrative through the process of interpreting themes (Tesch, 2020). Data from individual face to face interviews was analysed by grouping it into common items that emerged from participant's descriptions of their perceived perceptions.

Individual transcriptions from the research instrument were analysed individually, and categories were created to allow the researcher to identify similarities, differences, and relationships within information from the research instrument. The developed categories

from the research instrument were then grouped into themes. Thereafter, the data was further subjected to thematic analysis, a methodology that extracts meanings and concepts from data by examining and recording themes in order to find the meanings behind the perceived perceptions and of task-shifting on the respondents (Evans, 2017). Each theme was discussed with relevant quotations from the participants and relevant literature as a control to the findings.

Table 2.2: **The application of the Tesch's method (2013) to the study**

Step 1	Organising the data
Step 2	Finding and organising ideas and concepts/initial coding
Step 3	Generating Themes
Step 4	Validity and reliability of themes
Step 5	Defining and Naming themes
Step 6	Interpretation and reporting
Step 7	Draw Conclusions from the Coded Data.

Step 8	Report Your Methods and Findings.

The process started off by finding and marking the underlying ideas in the data. Thereafter, the data was closely examined to identify common themes that came up repeatedly and these were categorized together. The third step entailed, collating codes into potential themes. In step four, the themes were checked if they relate to the coded extracts. Subsequently, a thematic map was generated. Step five entailed this generating of clear and concise names for each theme. The sixth step involved the selection of appropriate extracts, discussion of analysis, and the relation of the analyses to the research question in order to report. The seventh step involves drawing conclusion from the Coded data. The 8th step involves reporting of methods and findings.

2.5 ETHICAL CONSIDERATIONS

Ethics is a branch of philosophy that deals with the conduct of people and guides the norms or standards of behaviour of people and relationships with each other (Maxwell, 2012). Therefore, ethics are the guidelines in researching within confined boundaries, while putting measures in place to ensure that the research collected and gathered is correct, accurate, and reliable (Maxwell, 2012). Ethics are important in the conduct of research as they ensure that the entirety of the research data is collected, understood, and explained, and is done in such a manner that it does not place any risk or harm to those that have been part of the research study. The researcher obtained Ethical Clearance Certificate from the University of Namibia's Research Ethics Committee,A research permission was obtained from the University of Namibia postgraduate research support

services. In addition, permission was also obtained from the Ministry of Health and Social Services (MoHSS) Ethics Committee , and Office of Regional Director for Khomas region. Anonymity was ensured in this study by assuring the participants that their names would not be disclosed, neither will their names be linked to their responses. Instead the researcher used pseudonyms. Furthermore, even though there were face-to-face interviews, the participant's names were not required. This is an additional way of ensuring anonymity and protecting the names of the participants.

Therefore, the following ethical considerations were considered in this study, Respect for persons; Non-maleficence; Beneficence and the Principle of Justice.

See Appendix A, B, C, D for permission letters to conduct study.

2.5.1 Respect for persons

The participants were informed about the purpose, objectives and benefits of the study. The researcher explained the nature of the study and obtain consent from the participants in the form of a signed Informed Consent form. The participants were accorded time to decide if they want to participate in the study and a chance to ask for further clarification if needed. Moreover, the participants were reminded of their voluntary participation and their right to withdraw at any moment during the interviews, without any consequence to them. Similarly, the participants were notified of the use of pseudonyms to maintain their anonymity. The participants were also notified of the confidentiality of the data. The transcripts would not be shared with third parties, with the exception of the supervisor. All data were securely stored on a password-locked computer until the examination and publication process is complete, after which it will

be permanently deleted after five (5) years. Moreover, the interviews were conducted in a private boardroom in the Katutura Health centre, with only the participant and the researcher at a time, in an effort to maintain their privacy. The interviews were only conducted once the participants signed an Informed Consent Form. See Appendix E.

2.5.2 Non –Maleficence

The principle states that there is an obligation on the researcher not to inflict harm on others (Jahn, 2012). In this study, no physical and psychological harm was caused to the participants, thus questions that were likely to invoke negative emotions of humiliation, stress, embarrassment or low self-esteem were avoided. Moreover, the researcher renegotiated the willingness to participate or withdraw their participation at any moment during the interviews. Also, the researcher ensured not to inflict unnecessary physical or psychological harm and where possible the researcher promoted the good of the research participants. Similarly, the participants were treated with utmost respect and fairness.

2.5.3 Beneficence

According to Jahn (2019) the principle of beneficence is a moral obligation on the part of the researcher to act for the benefit of the participants during the study and removing the circumstances that have the potential to cause harm. This study did not have direct benefits to participants, however the recommendations from the study were anticipated to result in future professional benefits to nurses performing male circumcision. The researcher minimised false expectations to participants by explaining to them that there would be no benefits of any kind nor would they stand to gain monetarily. To minimize

stress, the researcher made provision for participants to withdraw from the study at any point without fear or victimisation.

2.5.4 Principle of Justice

A paper by Jahn (2019) states that the principle of justice is concerned with equitable distribution of benefits, risks, costs and resources. In this study, the researcher applied purposeful sampling to ensure that participants were selected on the basis that they could provide rich and detailed information to answer the research questions. So as to accord each participant an equal opportunity to participate in the study, the interviews were conducted from Monday to Sunday from 08H00 to 20H00 for six (6) weeks**.**

2.6 SUMMARY

This chapter described the methodology and procedures that were used to collect the data from the respondents. This chapter also discussed the population, sample and sampling procedures, research instruments (interview guides, digital audio recorder and field notes), data collection procedures, and data analysis procedures. The ethics considered in ensuring the humane treatment of research participants were also discussed in the chapter. Findings and Literature control will be presented and discussed in the following chapter.

CHAPTER 3

FINDINGS AND LITERATURE CONTROL

3.1 INTRODUCTION

This chapter discusses the findings of data collected from registered nurses. The data were collected through face-to-face individual in-depth interviews. The main aim of the study was to explore and describe the perceived perceptions of registered nurses on task-shifting of male circumcision in public health facilities in the Khomas region. The key question for the research was: "What are your perceived perceptions on Male circumcision task-shifting from Medical doctors to nurses in public health facilities? For analysis purposes, the Tesch's method were used, from which a total of three (3) themes, and eight (8) sub-themes were derived from the data. Themes were discussed with relevant quotations from the participants and also with relevant literature as a control for the findings; hence literature control was incorporated.

3.2 DEMOGRAPHIC INFORMATION OF THE PARTICIPANTS

In this study, demographical data were obtained from the participants themselves, they entail information on the participant's background and personal information such as their gender, age, years of experience, and the health facility they work for. Codes were used instead of the names of the participants. The participants were identified as "P" followed by the number in sequence. The Table 3 represented the demographic information of the registered nurses who took part in the study. It also represented their gender, age, and the health facility they work for.

Table 3.1: Participant's demographical data

Name of Participant (P = Participant)	**Gender**	**Age (yrs)**	**Experience (Nursing) in years**	**Experience (Task shifting) in years**	**Health Facility**
P 1	Male	35	5	3	Katutura Health Centre
P 2	Female	32	6	2	Katutura Health Centre
P 3	Female	41	8	1	Katutura Health Centre
P 4	Female	29	2	1	Katutura Health Centre
P 5	Male	39	10	4	Katutura Health Centre
P 6	Female	59	32	4	Katutura Health Centre
P 7	Female	37	11	2	Katutura Health Centre

P 8	Male	38	9	3	Katutura Health Centre
P 9	Female	36	10	3	Katutura Health Centre
P 10	Female	35	3	2	Katutura Health Centre
P 11	Female	44	14	3	Katutura Health Centre
P 12	Female	37	11	2	Katutura Health Centre
P 13	Female	40	8	3	Katutura Health Centre
P 14	Female	39	9	1	Katutura Health Centre

The study had a total of fourteen (14) participants of which all of them are registered nurses and stationed at the Katutura Health centre. Out of fourteen (14) participants, only three (3) were male and the remaining eleven (11) were female. The ages of the participants ranged from 29 to 59 years of age which gave the average age for participants of 44 yrs.

3.3 THEMES AND SUBTHEMES OF THE STUDY

Three (3) main themes and eight (8) subthemes emerged from the data are discussed below. Participants' verbatim statements are in italics.

Table 3.2: Themes and sub-themes of the study

Themes	**Subthemes**
3.3.1 Enhancement of nurse ' s personal development	3.3.1.1 Adding new knowledge and skills on nurses' competences
	3.3.1.2 Expanding of independence functions of nurses
	3.3.1.3 Good experiences for nurses
3.3.2 Improvement of health care services	3.3.2.1 Enhancement of outputs on nursing services
	3.3.2.2 Reduction of long waiting lists of patients for circumcision
3.3.3 Challenges regarding task-shifting	3.3.3.1 Inability to perform male circumcision on clients with other conditions
	3.3.3.2 Additional duties with no extra compensation for nurses and Reducing of Medical doctor's workload
	3.3.3.3 Undermining the capabilities of nurses

	particularly female nurses

3.3.1 Enhancement of nurse's personal development

Male circumcision task-shifting, accords nurses an opportunity to reach a higher level of exposure leading to professional self-esteem. Enhancement of personal development in male circumcision task-shifting allows nurses to learn new knowledge and skills on a new task. According to a study done in United Kingdom by Tucker *et al.* (2015), personal development is a structured process whereby nurses reflect on their own learning, and performance. While, making plans how to advance their personal, educational and career development. The importance of enhancing the personal development was described in an article by Vasciuc (2020) in Romania, who found that enhancing personal development helps in retaining the skills and rewarding the services of nurses to their patients. Moreover, it assists in establishing and improving relations with other healthcare workers, themselves and patients. In terms of production, enhancing personal development of nurses results in increase productivity. This theme describes the mannerisms in how the personal development of nurses was enhanced as a result of task-shifting in male circumcision

3.3.1.1 Adding new knowledge and skills on nurses competences

According to Feiring and Lie (2018) adding new knowledge and skills on the skills the nurses already have refers to the expansion of the nurse's expertise and ability to conduct assessments, perform certain procedures and manage health conditions. They

further added that these excellent clinical skills are mostly learned through education and on the job training.

In this study, participants revealed that task-shifting add special skills and knowledge to the nurses that enhances their personal development. The following are some responses from the participants:

"*To me I perceive male circumcision* task-shifting *as good move, Good move in a sense that now nurses are capacitated with new knowledge and skills*" [P 8]

"*The* task-shifting *of male circumcision is good. Good because me as a nurse, I am capacitated, I am given the knowledge, the skills that prepared me for the great assignment of carrying out male circumcision procedures*" [P 14]

"*Now I can do male circumcision procedure, I am like a specialised nurse. To me this is a special skill to my nursing practice*" [P12]

"*I have gained profound knowledge in male circumcision, from performing the procedure to management of circumcision wound*" [P9]

Similar results were found in a qualitative study by Feiring and Lie (2018) in Norway. The authors found that task-shifting develops the technical skills of nurses, which they can apply to share tasks with Medical doctors. Feiring and Lie (2018) further indicated that the nurses who participate in task-shifting were accorded with new knowledge,

previously held by Medical doctors. Moreover, a study done by Tarimo et al in Tanzania found that nurses receive technical skills to perform new skills that they didn't have prior. The study further alluded that task-shifting advantage is the development of nurses that are highly knowledgeable and skilled and are in a better position to provide better services to patients.

A study conducted in Uganda by Baine and Kasangaki (2014) similarly found that task-shifting offers opportunities to improve health workforce skills. However, the same study found that if not properly implemented, task-shifting can leave nurses overwhelmed, with no new knowledge gained.

The application of the Roger's Theory states that there must be a driving force behind nurses accepting task-shifting. To which the study found is the opportunity to enhance their knowledge and skills, aspects that only Medical doctors had. Moreover, a report by the Ministry of Health and Social services (MoHSS, 2012) stated that the main aim of introducing task-shifting in healthcare facilities that offer MC services is to increase the knowledge and skills of non-physicians.

3.3.1.2 Expanding of independence functions of nurses

Independent nursing function refers to any aspect of nursing practice for which the nurse alone is responsible, acting on his or her own initiative and without instructions from any other discipline. Independence functions of the nurses is concerned with the manner in which nurses out their duties as registered nurses, whatever they do, they do on their own responsibility and accountability for in law they are personally liable for their acts of omission or commission (MoHSS, 2021).

By functioning independently, nurses can decide whether they are legally able, or knowledgeable and competent enough to execute a given task. Once nurses indicated acceptance they have made an independent decision and accepts full responsibility and accountability for their decision and actions. The nurses are solely responsible and accountable for their own practice where they have to accept responsibility for own actions. In terms of male circumcision task-shifting a nurse can perform independent interventions by conducting male circumcision procedures on their own without assistance from other medical personnel (MoHSS,2021).

The followings are responses from some participants:

"*I can perform male circumcision very well without the Medical doctors because I have seen it, and with my colleagues what we do, we perform the safe medical male circumcision procedures without any medical hazard, I mean I never got any complications in the theatre, hence for me, it is flexible, and sustainable at all times*".[P1]

" I can conduct the procedure alone, I don't need a medical doctor by my side, and I'm doing it just well" [P9]

" *I can do assessment of client coming for male circumcision, check for eligibility and then perform male circumcision procedure , and then seeing the client for follow ups, if there is an adverse event I can manage it .all these I can do alone without the help of a medical doctor*."

[P 2]

Furthermore, this study revealed that since the implementation of male circumcision task-shifting, nurses are now able to work independently as their competence are tested and verified. Some participants had this to say:

"*I am capable of doing male circumcision perfectly, since before I start doing procedures independently, I was required to do some cases of male circumcision procedures. Like, I have to do 20 cases under supervision, from that I have to be assessed for proficiency and when I was certified that I am proficient, then I was able do it alone*" [P4]

"Yes, first I did theoretical training through an online course, and then I receive my certificate of completion, then comes practical training which involves doing a certain number of circumcision procedures under supervision, after that then I was assessed for proficiency, but it didn't end there only. Every year I am being assessed for proficiency just to ensure that I am practicing within the required standards" [P10]

Similar results were found in studies conducted in sub-Saharan Africa and Namibia by Chu *et al.* (2012) and Simataa (2017) respectively, who both stated that well-trained non-physician teams have been shown to perform surgical tasks with comparable levels of safety. Similarly, the same practice of providing training and testing for competency was done by Linnea *et al.* (2018) in Zimbabwe with nurses who perform VMMC.

In addition, studies by Egessa (2019) and Kabwe (2022) conducted in Kenya and Zambia respectively have found that Standardized protocols, such as simplified clinical guidelines, recording and reporting systems, and monitoring and evaluation, are equally necessary for the successful implementation of task-shifting. Moreover, nurses need to have a defined scope of work to allow them to perform job functions that were commonly performed by higher level personnel. While also avoiding incidences of

untrained workforce providing care outside their scope, with serious complications, costs, and legal implications.

In contrast, the study conducted by Malterud *et al.* (2020) in Norway found that task-shifting has the potential to result in an increase in adverse events if proper planning and implementation to ensure patient safety are not done. The authors highlighted patients being at risk of hazardous delays, over diagnosis, endangered accountability and potential malpractice (Malterud *et al.,* 2020). Another contrary study done in Mozambique and Zambia by Ferrinho *et al.* (2014), found out that nurses are forced to work independently as a result of inadequate support and low supervision.

The advantages of expanding the independence functions of nurses include that it presents the opportunity of expanding the capability of nurses to work independently (MoHSS, 2012). Working independently render nurses capable, accountable, and flexible enough to perform the procedures without support from qualified medical practitioners (MoHSS, 2012). By functioning independently, nurses can decide whether they are legally able, knowledgeable and competent enough to execute a given task. The nurses are solely responsible and accountable for their own practice where they have to accept responsibility for own actions.

This study found that the participants added that working independently renders them capable, accountable, and flexible enough to perform the procedures without support from qualified medical practitioners. Moreover, this study found that nurses that were performing male circumcision were capable, and this is because they are professionals. This goes to show that with proper training, nurses can be empowered to take tasks

normally undertaken by Medical doctors. This study further found that nurses were actually provided with training on male circumcision, as a result they can execute this task on their own with the same competence as a Medical doctor.

According to the MoHSS (2021), the independent functions of the nurses is concerned with the manner in which nurses out their duties as registered nurses. Nurses conduct their duties and responsibilities being accountable, for they can be personally liable for their acts of omission or commission. According to WHO (2021) expanding of independence functions of nurses aims at capacitate nurses to independently execute tasks without support from qualified medical practitioners yet with full responsibility and accountability for their decision and actions.

3.3.1.3 Good experiences for nurses

Experiences refers to direct observation of or participation in events as a basis of knowledge. It is the fact or state of having been affected by or gained knowledge through direct observation or participation (Cambridge dictionary, 2021). In terms of task-shifting of male circumcision, it encompasses nurse's feelings as they are involved in conducting male circumcision procedures on their own. This study found that nurses have good experience of task-shifting as they regard it as a capacity-building exercise.

Here are some responses from participants:

"*It's a good experience for me, conducting male circumcision procedure gives me the feeling of a surgeon"*. [P5]

"*The experience is good, I feel good looking at clients that I have attended to, and they are going home with no complains with a circumcision procedure done by me a nurse."* [P 10]

"*...I feel good that I can attend to clients with adverse events and manage them very well until clients are discharged, it's a good experience to me*" [P 4]

Similar results were found in a study by Feiring and Lie (2018) conducted in Norway who found that nurses take cognizant of the benefits associated with task-shifting, which may include, expanding knowledge related to diagnostic criteria; knowledge regarding making decisions that may have consequences for future diagnosis and treatment and care. However, the same authors also found that task-shifting may be a threat to nurses as they fear losing their general nursing skills (Feiring and Lie, 2018). Similarly, Mabuza (2013) in a study conducted in Swaziland found that besides gaining extra knowledge and skills, the nurses' ability to take care of their patients holistically brings them satisfaction. However, Mabuza (2013) also found that shortages in human resources, infrastructure and medical consumables increases their workload and places them at risk of experiencing burn out and falling out love with the profession.

Furthermore, some nurses have reported concerns on their increased workload, and thought they should be given incentives (remuneration or allowances) for taking on added duties according to a study by O'Malley *et al.,* (2014) in Zimbabwe. On Contrary other studies by Ferrinho *et al.* (2012) in Sub-Saharan Africa found that nurses were not open to the idea of task-shifting, as they complained of being compelled to take over a diversity of extra tasks and a lack of adequate equipment. Another contrasting study by Mabuza (2013) in Swaziland found that nurses held the perceived perception that tasks were shifted to them from the Medical doctors without any guidelines.

The Roger's theory theorizes that when an individual accepts change, it occurs in 5 stages, namely, knowledge; persuasion; decision; implementation, and confirmation. The study has found that the nurses were persuaded to accept task-shifting in male circumcision due to the positive experience they had with it from the beginning, when it was introduced.

According to MoHSS (2017) the purpose of task-shifting is for nurses to gain good experiences in their new tasks and ensuring provider competence through accreditation and supportive supervision. WHO (2021) provided global recommendations and guidelines to help countries to implement task-shifting which include creating an enabling environment for implementation with emphasis on ensuring favorable experiences by nurses. Moreover, WHO (2021) alluded that male circumcision task-shifting aims to ensure positive embracing of male circumcision by nurses.

3.3.2 Improvement of health care services

Health care services refers to any services provided by a health care professional, or by any individual working under the supervision of a health care professional, that relate to the diagnosis, prevention, or treatment of any human disease or impairment (Centers for Disease Control and Prevention, 2022). Service improvements in health care services increase operational performance and staff satisfaction increases (CDC,2022). According to CDC (2022), task-shifting allows for the efficient use of insufficient human resources that are working in healthcare systems that are overburdened. Moreover, it is the most cost-effective mechanism to expand and strengthen health system capacity to increase access to male circumcision while maintaining essential health services.

In regard to male circumcision task-shifting improvement health care entails providing male circumcision services in health facilities in a manner that gives satisfaction to both clients and the staff. The second theme that emerged from the data is concerned with how healthcare services had improved as a result of task-shifting and how service delivery has improved.

3.3.2.1 Enhancement of outputs on nursing services

Ooutputs on nursing services entails the yield or total of anything produced by any functional system. Such outputs are usually measured in terms of quantity, quality and timeliness. In terms of male circumcision task-shifting, outputs may refer to the yield of circumcision services conducted by nurses, and the hours during which a service is available (WHO, 2016). This study revealed that the participants perceived that task-shifting on male circumcision helped to enhance the outputs on nursing services. Following are some responses from some participants:

"*.It's now easy to reach the target because doctors were not enough, at least we nurses are helping the ministry to reach the target*" [P 11]

"*Whenever people are coming in, they really get good support from all staff members. That is from health assistants, registered nurse's surgery nurses, and most of the people are turning up in numbers. So, I get quite a lot of clients, weekly, monthly, every time. So, I have never really come across whereby people are not turning up, mostly people are turning up in numbers*" [P1]

"*I mean I as a nurse I am able to deliver services faster to the clients"* [P3]

"*Task-shifting of male circumcision impacts the service provision in a good way because it increases the output of male circumcision, meaning that there are more circumcision procedures done per day since the nurses are also involved*" [P4]

The study found that task-shifting has led to less overcrowded health facilities.

Some participants had this to say:

"*. In the past the facilities were overcrowded especially during winter campaigns where most clients prefer to have circumcisions. But now the overcrowding is really reduced since us nurses came on board*" [P10]

"*If I can recall vividly when circumcision was not really rolled out, patients were coming in and they were just booking, and they have to wait really longer before they are attended to by doctors. But now patients are receiving services faster and they don't have to wait for longer periods for them to receive their male circumcision services, at the end of the day*"[P3]

"…*There are more hands now to perform male circumcision procedures*…" [P 1]

The findings of the study, were corroborated with a study by Chu *et al.* (2019) conducted in sub-Saharan Africa. The authors similarly found that task-shifting from Medical doctors to nurses in Africa can be regarded as viable, safe, cost-effective, widely accepted, and even preferred by patients. Similarly, they also found that it improves client retention and follow-up rates while increasing access to health services without sacrificing quality.

Similar results were found in a study by Seidman and Atun (2017) on low- and middle-income countries of Africa, Asia, and the Middle East. According to Seidman and Atun (2017), task-shifting if properly implemented improves the efficiency of healthcare facilities in a cost-effective way. As a result, healthcare facilities are not overcrowded as clients are not spending a tremendous amount of time in queues. The findings were disputed by Dlamini-Simelane and Moyer (2017) who conducted a study in Swaziland, that task-shifting does not necessarily strengthen health systems.

A study conducted in Netherlands by Martínez-González *et al.* (2015) stated that task-shifting enhances the outputs of nursing services as it addresses nursing shortages, while ensuring that healthcare workers are able to provide high-quality and affordable care to patients. Studies by Goshme (2012) and Lergarde *et al.* (2013) conducted in Botswana and South Africa, respectively also found that the task-shifting has favourable results in terms of feasibility, effectiveness, non-inferiority, and task-shifting benefits. In contrast, Nxumalo and Mchunu (2021), stated that task-shifting also negatively increased nurse workload.

The study finding is in line with Chu *et al.* (2019) who stressed that task-shifting is progressively being promoted as a coping strategy for both general and specific human resource shortages in the health care industry, and a systematic review of the literature on an effective strategy for addressing human resource shortages in health care revealed that task-shifting provides higher-quality, more cost-effective care to more patients than a physician-centred model (Chu *et al.,* 2019).

A paper by Simataa (2017) in Namibia highlighted the use of task-shifting in addressing human resource shortages in the health care industry. By moving away from a physician-centred model to one where the patients are provided with high quality services is a cost-effective manner according to Chu *et al.,* (2019). However, Simataa (2012) warned that the implementation of task-shifting must include adequate and efficient training; support and compensation for staff in new roles; integration of new members into healthcare teams, and regulatory body compliance.

Similar results were found in a review study by Leong *et al.* (2021), who found that task-shifting does increase service provision in a manner that is cost-effectiveness.

In contrast, the results were disputed by Dlamini-Simelane and Moyer (2017) who conducted a study in Swaziland, and they found that task-shifting does not result in an increase in the quality of services provided nor does it result in an increase in the number of people that require Male Circumcision services.

The Rogers Change Theory has three major concepts: driving forces, restraining forces, and equilibrium. This study found the driving forces behind task-shifting in male circumcision to be the benefits derived from task-shifting. This includes reduced overcrowding at health facilities, fast service delivery, increased number of circumcisions done.

According to WHO (2021), task-shifting is aimed at addressing human resource shortages and increase output in public health facilities. A cornerstone of success for the program is to ensure that a sufficient number of trained dedicated MC staff is available to provide services in the correct location. In other words, there needs to be a match

between the human resource capacity for MC and the size of the target group in any region in any given year (MoHSS, 2017).

WHO (2021), stated that task-shifting can improve the overall quality of health services, provided there are quality-monitoring mechanisms, training and continuous professional development for healthcare workers. Hence, why the World Health Organisation recommended implementing a specific regulatory framework that can support task-shifting in regions where human resources are limited resource-constrained settings (WHO, 2021).

3.3.2.2 Reduction of long waiting lists of patients for circumcision

Task-shifting has been credited with reducing the time that clients have to wait in long queues to receive service. It has the potential of improving the health delivery system (Okyere *et al.,* 2017).

With regard to male circumcision task-shifting have caused a reduction of long lists of booked clients for circumcision procedure. Following are responses from some participants:

"*The good thing about Male circumcision* task-shifting *is that the long waiting list for clients booked for male circumcision is not there again. This is because in the past only medical doctors only were performing male circumcision and doctors are also few*"[P1]

"*And at the end of the day patients are receiving services faster and they don't have to wait for longer periods for them to receive their male circumcision services, at the end of the day*"[P3]

"*There are no long waiting lists compared to when only doctors were performing male circumcision alone"* [P7]

Similar results by Nxumalo and Mchunu (2020) in their study conducted in South Africa emphasized the benefits of task-shifting, as including lower transportation costs for patients, shorter wait times at clinics, fewer missed appointments, and lower mortality, and fewer patient losses.

A study by Baine and Kasangaki (2014) conducted in Uganda found similar results to those found in this study that say task-shifting reduces long waiting periods of clients before they can be given services. According to Baine and Kasangaki (2014) task-shifting can be viewed as a measure to minimize the human resource shortage crisis in health care, in a manner that is cost-effective.

The study found that as a result of task-shifting, nurses do not have to deal with long waiting lists or long queues of clients who were waiting for Medical doctors that normally don't show up on time due to a heavy workload. The heavy workload of Medical doctors tends to overlook MC at the behest of other more serious health conditions. Hence, the participants perceived that by not waiting on Medical doctors to conduct procedures that nurses were fully capable of handling.

According to MoHSS (2021), male circumcision task-shifting is aimed to provide viable solution for improving health care coverage and reduce client's waiting time in public health facilities. Moreover, the World Health Organisation recommended for low-and middle-income countries to implement task-shifting as a way of ensuring that

the activities in healthcare facilities are streamlined. Hence, patients do not incur long lines at healthcare facilities (WHO, 2019).

3.3.3 Challenges regarding task-shifting

According to the Cambridge dictionary (2021), a challenge can be defined as a situation that requires great mental or physical effort in order to be done successfully, or a situation that requires great effort (Cambridge dictionary, 2021).

This study revealed that the participants perceive task-shifting of male circumcisions as a challenge. The challenges identified in this study are: inability of registered nurses to perform male circumcision on clients with certain conditions; additional duties with no extra compensation and undermining the capabilities of nurse's particularly female nurses.

3.3.3.1 Inability of registered nurses to perform male circumcision on clients with certain conditions

Not all cases for Male Circumcision (MC) are straight forward. The study found that there are clients that want to undergo MC but have medical conditions that are beyond the scope of nurses, such as epispadias, hypospadias, severe phimosis, and balanitis. According to Bizic *et al.* (2022), epispadias is a disorder whereby the tube doesn't form correctly, in hypospadias, the urethra is not fully developed hence, the urethral opening is in a different position along the bottom of the penis. Phimosis, which is the inability to retract the foreskin covering the head of the penis may occur alongside either balanitis. Balanitis occurs when the penis head is swollen (Morris & Krieger, 2017).

Moreover, clients with certain medical conditions such as Congestive cardiac failure, Diabetes, Renal failure cannot be done by nurses but Medical doctors only (WHO, 2029).

The following are responses from some participants:

" *As* a *nurse doing circumcision procedures I am not able to do on clients with conditions such as epispadias, hypospadias, severe phimosis, balanitis. Also, on clients with medical conditions such as uncontrolled diabetes, Congestive cardiac failure, and renal failure. These clients are only done by medical doctors*" [P1]

"*The main challenge is when there is a client with cases such as diabetes, heart conditions (Cardiac Failure), other urological conditions such as; balanitis, paraphimosis, epispadias, and hypospadiasas. These types of conditions cannot be done by me a nurse, they require the intervention of a medical doctor. It is bad that these clients have to be referred to the Urology department where they will be booked before they are attended to by the doctors. This whole process might take a bit of time before the client get assistance*" [P8]

The results are similar to that of Chu *et al.* (2012) in sub-Saharan Africa who found that task-shifting is yielding positive outcomes, because even though nurses are providing care outside their scope of practice without proper training and guidance they are still willing to do it. Kambwe (2022) in a study done in Zambia found that the clear definition of the scope of work is needed to allow personnel to perform job functions that are commonly performed by higher level personnel, as well as to avoid untrained

workforce providing care outside their scope, with associated complications, costs, and legal implications.

This study found that nurses do not have the capability to conduct male circumcision on clients with certain urology conditions such as epispadias, hypospadias, severe phimosis, and balanitis, as well as on clients with medical conditions such as uncontrolled diabetes, congestive cardiac failure, and renal failure as these clients are only done by Medical doctors. The Rogers Change Theory has three major concepts: driving forces, restraining forces, and equilibrium. Restraining forces were also found to be in existence by the study, they include, lack of skills to conduct male circumcision on patients with medical conditions; lack of recognition of task-shifting in male circumcision as a stand-alone programme that requires support and the perceived perception from clients that male circumcision is better done by medical doctors rather than nurses.

According World Health Organisation (2019), contraindications to male circumcision procedure by nurses include conditions such as high blood pressure, epispadias, hypospadias, severe phimosis, and balanitis, as well as on clients with medical conditions such as uncontrolled diabetes, congestive cardiac failure, and renal failure. These cases should be deferred and referred to Urology department.

3.3.3.2 Additional duties with no extra compensation for nurses and Reducing of Medical doctor's workload

Additional duties entails performing extra things apart from the ones already present (Cambridge dictionary, 2021). According to the Cambridge dictionary (2021), extra compensation is salary paid in excess of an employee's base salary for effort that is

performed in addition to or outside of effort spent on normal job duties. The study had earlier highlighted the advantages of task-shifting, this section presents the impact of additional tasks to nurses that do not form part of their scope of practice. This study revealed that some of the participants feel that they need extra compensation due to the fact that male circumcision is an additional duty added on their scope of practice.
Some participants had this to say:

"*...because already I am doing what was not part of my scope of practice sometimes I even see clients on weekends but no extra compensation at all*"[P7]

"*…like me a nurse who conduct male circumcision on a part time basis, I am overworked because I have other tasks that I am doing full time*". [P11]

" *I feel like male circumcision to me it is kind of a burden because I'm fully delegated for my daily clinical tasks, but i still have to do male circumcision and there is no single benefit i am getting, at least if i can be given something then i can say i am motivated to do male circumcision*" [P6]

Similar results were found by Ferrinho *et al.* (2014) in a study conducted in Mozambique and Zambia, who found that nurses do not receive financial compensation for activities conducted as a result of task-shifting. A study by Kharsany *et al.* (2016) conducted in sub-Saharan Africa, similarly found that there is little to no compensation of nurses, hence the long-term success of task-shifting is significantly compromised. A South African study by Nxumalo and Mchunu (2020) attribute the lack of financial

compensation as a result of a lagging regulatory framework, professional protectionism, and a lack of mentoring support as barriers that are hampering task-shifting from being recognized and subsequently eligible for compensation.

This study found nurses did not receive extra compensation for conducting male circumcision surgeries as the task-shifting program is not well rolled out. Also, the findings of the study indicate that nurses who conduct male circumcision surgeries are overwhelmed by the workload and they do not receive extra compensation for male circumcision clients attended to over the weekends.

According to MoHSS (2017) scaling up of male circumcision task-shifting should be via integration of services with other prevention programmes and not being a stand-alone program with extra costs. The World Health Organization (2019) has recommended that Male Circumcision should not be implemented in isolation, but that it should complement existing prevention strategies. WHO (2019) further added that the provision of male circumcision in public health facilities regardless of model or venue, must adhere to the recommended minimum package for male circumcision services, and there should not be extra burden to the Ministry of health and social services in terms of budget.

This theme further analyses the impacts of Male Circumcision task-shifting on Medical doctors. This refers to task-shifting being a solution by lessening a burden from medical doctors who are overstretched and occupied with work in public health facilities. With regard to male circumcision task-shifting this entails nurses performing male circumcision procedures which was initially doctor's roles, (MoHSS, 2021).

By doing so, doctors are being relieved from a task and this allows them to pay attention to other chores. Health workers shortage can hinder access to quality healthcare and the impact is greater if such shortages are accompanied by an unequal distribution of the work force (MoHSS, 2021).

The inadequacy of doctors in the Namibian public health sector is a barrier to rapid male circumcision scale-up. Medical doctors are overwhelmed; therefore, the implementation of male circumcision task-shifting decrease some burden off the doctor's shoulders (Ncube et al., 2012).

Some participant's responses are:

"*I believe it has really made work easier for everybody, and mostly for the doctors they don't have to be overwhelmed*". [P5]

"*First the work load is reduced from doctors who were the sole providers of male circumcision procedures*". [P11]

"and you know doctors are already overwhelmed, so at least some burdens are released from them and they are now able to focus more on other tasks and procedures". [P13]

"*We all know doctors have a lot of things to do. Morning they have ward rounds, then they go to Out Patient Departments, and then Male circumcision again. Instead of waiting for one doctor who is very overwhelmed, at least there are registered nurses who can do male circumcision procedures*"[P2]

"*Doctors can attend to other conditions that they are supposed to attend to…*" [P6]

"...Task-shifting *made work easier especially for doctors, at least they can concentrate on difficult procedures while nurses are also doing circumcision*"[P12]

"*I believe it has really made work easier for everybody, and mostly for the doctors they don't have to be overwhelmed*"[P3]

"*First the work load is reduced from doctors who were the sole providers of male circumcision procedures*".[P11]

The findings are similar to a study done in Europe by Leong *et al.,* (2021) who found evidence of task-shifting reducing the workload of Medical doctors. The same sentiments were shared in a study in Uganda by Baine and Kasangaki, (2014), who found that by enabling well-trained clinical personnel to perform all steps of the male circumcision procedure, it has several advantages. Most especially in healthcare environments with minimal resources, as it frees up the doctor's time to focus on more urgent medical cases. Nxumalo and Mchunu (2020) in their study conducted in South Africa similarly found that the existing pool of skilled health workers is unequally distributed.

While Ferrinho *et al.* (2014) who conducted a study in Mozambique and Zambia found that task-shifting increases the capacity of nurses and allow Medical doctors in coping with heavy workloads. In contrast a study by Okyere *et al.* (2017) in Ghana found that

task-shifting does not necessarily reduce the workload of Medical doctors, rather it helps and supports all healthcare workers in ensuring by that patients are taken care of.

By having nurses conduct male circumcision, consultations with Medical doctors are only necessary for more complex conditions that are beyond the knowledge base, levels of training and competence of nurses. Thus, task-shifting allows for an efficient and equitable distribution of human resources in healthcare facilities. This study found that task-shifting reduces the workload of Medical doctors and nurses. Moreover, the participants alluded to the reduction of workload for both nurses and Medical doctors. Hence, both nurses and Medical doctors are no longer feeling overwhelmed.

According to MoHSS (2021) Male circumcision policy, minor surgery such as male circumcision can be performed by nurses to allow the expansion and retention of the program and at the same time reduce some burdens from Medical doctors through task-shifting strategies.

According to a policy brief from the Centre for Disease Control and Prevention (2022), Task-shifting allows for low- and mid-level health professionals to perform tasks that were normally restricted to Medical doctors. Thus, it provides more free time for Medical doctors to attend to more complicated and urgent medical cases.

According MoHSS (2021) the country is still grappling from a shortage of Medical doctors. The shortage of Medical doctors has hindered citizen's access to quality healthcare and the impact is even greater as such shortages are accompanied by an unequal distribution of the work force. Hence, the introduction of task-shifting which

entails nurses performing male circumcision procedures which were initially a role played by Medical doctor (MoHSS, 2021).

3.3.3.3 *Undermining the capabilities of nurses particularly female nurses*

According to Cambridge dictionary (2021), capability refers to the ability of being able, it is the power or ability to do something. The notion that only Medical doctors can perform surgeries has led to nurses being undermined and viewed as incapable of conducting surgeries (Hankins *et al.,* 2012). The study found that nurses perceived having their capabilities and proficiency in conducting male circumcision surgeries to clients. This has been viewed as a challenge by some of the nurses. However, the participants have stated that most of the time, clients do not know how to differentiate between a doctor, and a registered nurse, they introduce themselves as per their title. This indicates the level of trust that patients have in healthcare workers.

Some participants had this to say:

"*I remember of a case where one client was asking for a doctor. Saying he don't want to be circumcised by nurses but doctors only. However, he was later convinced by his friend who also came for circumcision that they should just do it…* [P11]

"A few of the clients want to be circumcised by doctors only and you know you need enough time to engage them before they can make a decision whether to be circumcised by a nurse or not" [P9]

"*And some clients would prefer to be circumcised by male nurses, but this is quite rare, majority of the clients I have seen don't mind being circumcised by me a female nurse*" [P 13]

"*I remember a client asking me whether I am a nurse or doctor, and when I said I am a nurse then the patient asked me further how long have I been doing circumcision, he wanted only a doctor to circumcise him…*" [P8]

This study is similar to a study done by Umar *et al.* (2013) in Malawi who found that the refusal to be circumcised by nurses could be related to gender and cultural aspects, rather than the abilities of nurses. According to Umar *et al.* (2013), clients were not entirely comfortable having a female nurse conducting a male circumcision surgery on them. Moreover, the study by Umar *et al.* (2013) highlighted that sexual undertones and the influences of traditional male circumcision practices, make them uncomfortable to being circumcised by female nurses.

On Contrary, a study by Dworkin (2012) in Swaziland found that clients do not mind whether they are being circumcised by a male nurse or female, neither do they mind whether they are being circumcised by a medical doctor or a nurse.

Furthermore, it should be noted that nursing is a predominately female-dominated profession, according to a study conducted by Mao *et al.* (2021) in China. The cultural aspects were best described in a study by Nxumalo and Mchunu (2021), who found that Zulu men were especially hesitant to be circumcised by women, as they feel that it is disrespectful to them. The study found some clients refuse to be circumcised by nurses.

On the contrary, Vera *et al.* (2014) in a study done in Kenya found that trained, experienced nurses and clinical officers provided safe Voluntary medical male circumcision (VMMC) in public health facilities as evidenced by the low adverse event rate. These results add to the current body of evidence suggesting that trained non-physicians can provide safe medical male circumcision, thereby facilitating increased availability and access to circumcision services.

One of the major concepts of Rogers Change Theory is restraining forces which is in existence as the perceived perception from clients that male circumcision is better done by medical doctors rather than nurses.

According MoHSS (2019), Male circumcision services should be offered by doctors and appropriately trained registered nurses and midwives under the guidelines put forth by the Ministry of Health and Social Services and the Health Professional Council of Namibia (HPCNA) to ensure safe, comprehensive male circumcision services. Furthermore, male circumcision should be promoted and done in a culturally appropriate manner.

3.4 SUMMARY

This chapter presented the data obtained from the interviews that were utilised in this study that explored and described the perceived perceptions of registered nurses on task-shifting of male circumcision in public health facilities in the Khomas region. This method of data collection provided a deep understanding and insight into the impact of

task-shifting of male circumcision on service provision and delivery. The findings of the study were discussed under the relevant literature control and thus made significant contribution to the already existing knowledge bank. The next chapter presents the conclusions based on the findings of the study, recommendations and limitations experienced in carrying out the study.

CHAPTER 4

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

4.1 INTRODUCTION

This chapter aimed at presenting the conclusion of the study as per research objectives, limitations and giving the recommendations that need to be addressed to find solutions to the problem. The conclusions were drawn from the findings of the study that are based on the objectives of the study.

4.2 CONCLUSIONS

The following conclusions were derived from the findings of this study and are discussed as per study objectives:

4.2.1 Explore the perceived perceptions of registered nurses on task-shifting of male circumcision in public health facilities in the Khomas region.

This study concluded that the registered nurses perceived task-shifting of male circumcision as an activity that is enhancing their personal development; whereby nurses have been capacitated to perform a new task. Moreover, the nurses also perceived that task-shifting of male circumcision adds new knowledge and skills on how to perform the male circumcision procedure. The independent function of nurses has also been expanded as a result of male circumcision task-shifting, as they are now able to work independently as their competences are tested and verified.

The study also revealed that nurses have good experiences with male circumcision task-shifting as they perceive it as a capacity building exercise. Furthermore, this study concluded that healthcare services have improved as a result of task-shifting and service delivery has improved, with increased service output, less overcrowded facilities leading to reduced waiting list for circumcision clients.

This study further concludes that male circumcision task-shifting has resulted in some duties being released from medical doctors, allowing ample time for medical doctors to focus on other vital tasks which nurses cannot do. Moreover, some aspects were found to be challenges to male circumcision task-shifting, which include: inability to perform male circumcision on clients with certain medical conditions such as patients with epispadias, hypospadias, severe phimosis, and balanitis. This also includes clients with medical conditions such as uncontrolled diabetes, congestive cardiac failure, and renal failure. Nurses raised concerns of doing extra duties with no extra compensation and they feel the need for extra compensation. Another challenge is the issue of some clients preferring doctors over nurses for circumcision procedure.

4.2.2 Describe the perceived perceptions of registered nurses on task-shifting of male circumcision in public health facilities in the Khomas region.

This study concluded that nurses perceive that the task-shifting adds special skills and knowledge to them that enhances their personal development. Nurses have gained profound knowledge on male circumcision. This is a new skill which nurses did not have before. Moreover, the skills and knowledge was gained through theoretical and practical training. This is to ensure that nurses are fully capacitated and have properly

undergone the required trained to equip them with necessary skills to be able carry on a new task which was not part of their scope of practice.

This study concluded that nurses are now able to work independently without a doctor present, they can perform male circumcision procedure from begin to the end, they can do assessment of clients coming for circumcision services for eligibility, they can attend to male circumcision follow ups. This is possible because their competence has been tested and verified. Making them qualified and proficient to perform male circumcision without Medical doctor's guidance and supervision.

This study further concluded that task-shifting of male circumcision gave nurses good experiences, the fact that they can attend to and resolve adverse events on their own. The nurses regarded this as a capacity building exercise, which gives them a good feeling and a sense of contentment. In addition, there has been a significant improvement in service delivery as evidenced by reduction in waiting lists or long queues of clients waiting for male circumcision services at public health facilities. This study found that task-shifting has improved the provision of nursing services to the public as it is centred on the needs of the client. As the male circumcision service is readily available and those who have undergone the procedure done by nurses were recommending it to others in their local communities. Increase in service delivery was found by this study as one of the ways in which task-shifting has improved service delivery of male circumcision services in public health facilities.

The facilities were no longer overcrowded as there are more human resources in the form of nurses to conduct male circumcision procedure unlike in the past when Medical

doctors where the sole providers of male circumcision procedures. In regards to the local communities, the study has found that there has been an increase in the number of men seeking male circumcision services. Hence, reducing marketing and advertising costs associated with male circumcision campaigns that were previously organised with the aim of reaching out to the public. Now because of task shifting there is no more a need to have campaigns to market male circumcision. An increased output in the number of male circumcision procedures has allowed the Ministry of Health and Social Services to easily meet its target. In regards to Medical doctors, their workload has been significantly reduced as they can attend to other more serious health complications and surgeries. The task-shifting is perceived to have released some burdens off the medical doctors who are very few and they are already overwhelmed.

The research question for this study was: "What are the perceived perceptions of registered nurses regarding the task-shifting of male circumcision"? This study has explored and described the perceived perceptions of registered nurses on task-shifting of male circumcision in public health facilities in Khomas region, hence the research question has been well answered.

4.3 RECOMMENDATIONS FROM THE CURRENT STUDY

The following recommendations were given following what the study has found, and such recommendations are the proposed suggestions of what needs to be done:

- Ministry of Health and Social Services (MoHSS) must allocate financial resources to the male circumcision program to ensure that the program is well rolled out

in the communities and other regions to aid in scaling up of VMMC and reach the expected national target of 80% saturation.

- Communities need to be educated on the capabilities of nurses when it comes to conducting circumcision procedures. Hence, this study recommends that health facilities should come up with strategies on how to educate the communities on the capabilities of nurses.
- There is a need for nurses to keep abreast with new developments regarding male circumcision procedures. Hence, the MoHSS should provide continuous training and refresher training for the nurses to gain more skills, and knowledge and improve where they can, in order to provide quality healthcare services to clients.
- The inability of nurses to conduct male circumcision on patients with medical conditions incapacitates them. Hence, healthcare facilities should have Medical doctors on standby to address cases like this. To avoid incidences of referring clients to hospitals and risk turning away clients.

4.3 RECOMMENDATIONS FOR FUTURE STUDIES

This researcher recommends future research to include:

- A wider range of healthcare workers, including Medical doctors, more healthcare centres, clinics and hospitals from other regions in Namibia that perform Male Circumcision to get their perspective on task-shifting of male circumcision. This can be useful for comparison to this study and better generalization.

- Male circumcised clients to get their perspective on task-shifting of male circumcision. This can assist to identify possible service delivery challenges which may hinder the effectiveness of task-shifting implementation in public health facilities.

4.4 CONTRIBUTION TO THE BODY OF KNOWLEDGE

This study has contributed to the new knowledge by revealing the perceived perceptions of Registered nurses regarding male circumcision task-shifting in public health facilities that was previously not known. Moreover, this study has the potential to benefit Namibian health leaders as from the findings of this study they may be able to implement strategies and suggest ways in which task-shifting of male circumcision can be utilized to its full potential for the benefit of the patients, and the health care sector at large. Furthermore, this study has also the potential to benefit the Ministry of Health and Social Services (MoHSS) as it can contribute significantly towards the development of task-shifting in health care facilities by suggesting ways in which MoHSS can develop a structure that leads to the effective utilization of human resources with regards to task-shifting for the improvement of health care delivery.

4.5 LIMITATION OF THE STUDY

The study was limited to one region in Namibia. This implies that the findings of the study cannot be generalised to other regions; with an exception of districts that may have similar characteristics to the context of the study.

Population effect: The population studied was relatively small and limited to the Katutura Health Centre staff only. The scope of a contextual study could be made

sufficiently large, for instance, covering participants who perform male circumcision and do assessment of circumcision clients from other health facilities.

Data collection and data analysis effects: Potential participants could not partake in the study because they were exposed to COVID-19 and were on isolation during interview period. Other potential participants canceled the interviews at the last minute because they were allocated to another facility. This was due to staff members being infected with COVID-19 and booked off, for days at a time. However, the researcher used telephonic interviews with some participants who could not be interviewed face to face. This posed some limitations on the amount and quality of data collected as the researcher could not observe non-verbal communications. Also due to the fact that little documented information in Namibia regarding perceived perceptions of registered nurses on male circumcision, this has posed a challenge of sufficient literature availability.

Participant's effects: The risk of the Hawthorne effect was identified, given that the researcher is known to the participants as they work in the same facility. This had the potential to influence their responses. The researcher observed that participants might have withheld certain information about their perceived perceptions due to a fear that revealing everything might displease the researcher. Before the interviews, the researcher explicitly communicated to participants, encouraging them to freely and honestly express themselves. It was emphasized that the information gathered was solely for academic purposes, and there was no personal attachment to their responses. The researcher used code names to identify participants instead of their real names.

4.6 CONCLUSIONS

The study focused on the perceived perceptions of registered nurses on task-shifting of male circumcision. This study achieved its aim of exploring, and describing the perceived perceptions of registered nurses on task-shifting of male circumcision in public health facilities in the Khomas region. The study sought to achieve the following objectives: exploring, and describing the perceived perceptions of registered nurses on task-shifting of male circumcision in public health facilities in the Khomas region.

Based on the findings of this study, it is concluded that registered nurses have good and positive perceived perceptions of task-shifting of male circumcision, and this is because they considered task-shifting as a capacity building activity. After all, nurses are now equipped with special skills, and knowledge that was not part of their scope of practice initially, hence with task-shifting nurses can deliver services faster to clients, compared to when Medical doctors were sole providers of male circumcision, thus reducing long waiting periods and overcrowded facilities. According to the study, nurses are capable, accountable, and flexible in conducting male circumcision procedures without a doctor present. Therefore, nurses are capable of doing male circumcision perfectly because before they started doing circumcision procedures independently, they were required to do some cases of male circumcision procedures, which enhanced their skills, and competence.

Based on the results of the study, clients that are coming in for male circumcision are satisfied, as they do not see any difference in the procedures being carried out by nurses or Medical doctors. Furthermore, the results of the study have shown that male

circumcision task-shifting has made circumcision services to be accessible to the clients since the services are now readily available, and every time the clients are ready, they can go, and receive their circumcision services. It was found that task-shifting of male circumcision affected the service provision positively. This is because more clients can be reached and assisted. After all, the ministry is now able to scale up unlike in the past when few Medical doctors were doing circumcision, which resulted in long waiting periods, and poor service delivery. The study concluded that there are some challenges associated with male circumcision task-shifting which may affect the effectiveness of male circumcision task-shifting. Therefore, it can be concluded that the study has achieved its main objective of exploring, and describing the perceived perceptions of registered nurses on task-shifting of male circumcision in public health facilities in the Khomas region.

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ANNEXURE A: ETHICAL CLEARENCE CERTIFICATE FROM THE UNIVERSITY OF NAMIBIA

UNAM
UNIVERSITY OF NAMIBIA

ETHICAL CLEARANCE CERTIFICATE

Ethical Clearance Reference Number: SON 0002 Date: 18 October 2021

This Ethical Clearance Certificate is issued by the University of Namibia Ethics Committee (REC) in accordance with the University of Namibia's Research Ethics Policy and Guidelines. Ethical approval is given in respect of undertakings contained in the Research Project outlined below. This Certificate is issued on the recommendations of the ethical evaluation done by the ethics committee.

TITLE OF PROJECT: PERCEPTIONS OF REGISTERED NURSES ON TASK- SHIFTING OF MALE CIRCUMCISION IN PUBLIC HEALTH FACILITIES IN KHOMAS REGION, NAMIBIA.

Student: ESTER N. MWANYANGAPO

Student Number: **200251287**

Supervisor(s): **Dr ESTHER KAMENYE**

Centre for Research Services

Take note of the following:

1. Any significant changes in the conditions or undertakings outlined in the approved Proposal must be communicated to the ethics committee. An application to make amendments may be necessary.
2. Any breaches of ethical undertakings or practices that have an impact on ethical conduct of the research must be reported to the ethics committee
3. The Principal Researcher must report issues of ethical compliance to the ethics committee (through the Chairperson) at the end of the Project or as may be requested by the ethics committee
4. The ethics committee retains the right to:

i) Withdraw or amend this Ethical Clearance if any unethical practices (as outlined in the Research Ethics Policy) have been detected or suspected,

ii) Request for an ethical compliance report at any point during the course of the research.

The ethics committee wishes you the best in your research.

Name (Chairperson Ethics Committee)

Prof. Davis Mumbengegwi (Head, Multidisciplinary Research)

ANNEXURE B: RESEARCH PERMISSION LETTER FROM THE UNIVERSITY OF NAMIBIA

RESEARCH PERMISSION LETTER

Date: 27/09/2022

Student Name: ESTER MWANYANGAPO

Student Number: 200251287

Programme: Masters in Nursing Science

Approved Research Title: PERCEPTIONS OF REGISTERED NURSES ON TASK-SHIFTING OF MALE CIRCUMCISION IN PUBLIC HEALTH FACILITIES IN KHOMAS REGION, NAMIBIA.

TO WHOM IT MAY CONCERN

I hereby confirm that the above-mentioned student is registered at the University of Namibia for the programme indicated. The proposed study met all the requirements as stipulated in the University guidelines and has been approved by the relevant committees.

The proposal adheres to ethical principles as per attached Ethical Clearance Certificate. Permission is hereby granted to carry out the research as described in the approved proposal.

Best Regards

Dr. AEE Shikongo
Head: Postgraduate Support Services
Tel: +264 61 206 3129
E-mail: aeshikongo@unam.na

CENTRE FOR RESEARCH SERVICES
Office of the Director
2022 -09- 27
University of Namibia
UNAM

ANNEXURE C: PERMISSION LETTER FROM THE MINISTRY OF HEALTH AND SOCIAL SERVICES ETHICAL COMMITTEE

REPUBLIC OF NAMIBIA

MINISTRY OF HEALTH AND SOCIAL SERVICES

Ministerial Building
Harvey Street
Private Bag 13198, Windhoek

OFFICE OF THE EXECUTIVE DIRECTOR

Tel: No: 061 -203 2507
Fax No: 061-222 558
Andreas.Shipanga@mhss.gov.na

Ref: 17/3/3/ENM
Enquiries: Mr. A. Shipanga

Date: 15 December 2021

Ms. Ester N. Mwanyangapo
PO Box 97658
Maerua Mall
Windhoek

Dear Ms. Mwanyangapo

Re: Perceptions of Registered nurses on Task-Shifting of male circumcision in public Health Facilities in Khomas Region, Namibia.

1. Reference is made to your application to conduct the above-mentioned study.
2. The proposal has been evaluated and found to have merit.
3. **Kindly be informed that permission to conduct the study has been granted under the following conditions:**
   - 3.1 The data to be collected must only be used for academic purpose;
   - 3.2 No other data should be collected other than the data stated in the proposal;
   - 3.3 Stipulated ethical considerations in the protocol related to the protection of Human Subjects should be observed and adhered to, any violation thereof will lead to termination of the study at any stage;
   - 3.4 A quarterly report to be submitted to the Ministry's Research Unit;
   - 3.5 Preliminary findings to be submitted upon completion of the study;
   - 3.6 Final report to be submitted upon completion of the study;
   - 3.7 Separate permission should be sought from the Ministry for the publication of the findings.
4. All the cost implications that will result from this study will be the responsibility of the applicant and **not** of the MoHSS.

Yours sincerely,

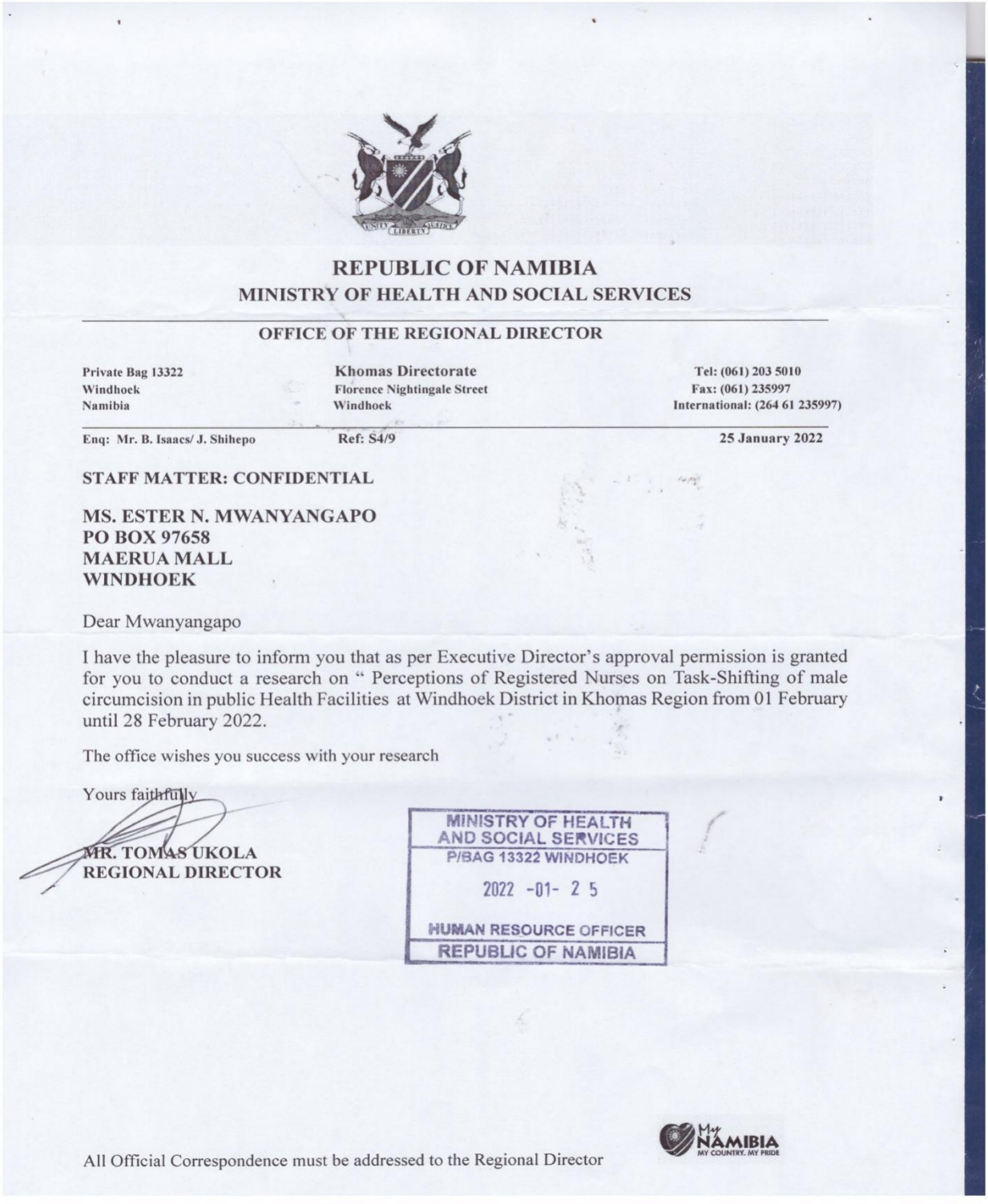
EXECUTIVE DIRECTOR
MINISTRY OF HEALTH AND SOCIAL SERVICES

BENNANGOMBE
EXECUTIVE DIRECTOR

All official correspondence must be addressed to the Executive Director.

NAMIBIA

ANNEXURE D: PERMISSION LETTER FROM THE OFFICE OF THE REGIONAL DIRECTOR, KHOMAS REGION, MINISTRY OF HEALTH AND SOCIAL SERVICES



REPUBLIC OF NAMIBIA
MINISTRY OF HEALTH AND SOCIAL SERVICES

OFFICE OF THE REGIONAL DIRECTOR

Private Bag 13322
Windhoek
Namibia

Khomas Directorate
Florence Nightingale Street
Windhoek

Tel: (061) 203 5010
Fax: (061) 235997
International: (264 61 235997)

Enq: Mr. B. Isaacs/ J. Shihepo Ref: S4/9 25 January 2022

STAFF MATTER: CONFIDENTIAL

MS. ESTER N. MWANYANGAPO
PO BOX 97658
MAERUA MALL
WINDHOEK

Dear Mwanyangapo

I have the pleasure to inform you that as per Executive Director's approval permission is granted for you to conduct a research on " Perceptions of Registered Nurses on Task-Shifting of male circumcision in public Health Facilities at Windhoek District in Khomas Region from 01 February until 28 February 2022.

The office wishes you success with your research

Yours faithfully

MR. TOMAS UKOLA
REGIONAL DIRECTOR

MINISTRY OF HEALTH AND SOCIAL SERVICES
P/BAG 13322 WINDHOEK
2022 -01- 2 5
HUMAN RESOURCE OFFICER
REPUBLIC OF NAMIBIA

All Official Correspondence must be addressed to the Regional Director

My NAMIBIA MY COUNTRY. MY PRIDE

ANNEXURE E: INTERVIEW GUIDE

AN INTERVIEW GUIDE

PERCEIVED PERCEPTIONS OF REGISTERED NURSES ON TASK-SHIFTING OF MALE CIRCUMCISION IN PUBLIC HEALTH FACILITIES IN KHOMAS REGION, NAMIBIA

1.Data collection Instruments

- Pen
- Audio recorder
- Field notes
- Interview guide
- Consent form

2. Introduce myself to the participant

- The researcher introduces him/herself and explains the purpose of the interview, address terms of confidentiality, indicate how long the interview will take,
- Emphasize the ethical aspect of research which are; privacy and confidentiality, autonomy, voluntary withdrawal at any time from the study, anonymity; their identity is going to be safe guarded
- Sits in a quiet room

- Inform the participants how to get in touch later if they want to and ask them if they have any questions before they both get started

Main question

- What are your Perceived perceptions on task-shifting of male circumcision from doctors to nurses in public health facilities?

Possible probing questions:

1	Describe your perceived perceptions on male circumcision task shifting?
2	Describe client satisfaction
3	In your perceived perception elaborate how task shifting made working easy or difficult?
4	What is the impact of task shifting in the service provision?
5	What are your views on nurse's capability to conduct male circumcision without a doctor present?
6	How do you view the service provision to clients coming in for male circumcision?
7	How do you describe any advantages or disadvantages of male circumcision task shifting?

Clarifying/interpreting questions

- So, does it mean…….?
- Would I be right if I interpret that as…….?
- Are you saying……?

Closing questions

- Is there anything you would like to add…...?
- Have we missed something you think is important…?

Closing remarks

Thank you very much for your time and participation, have a good day!

ANNEXURE F: INFORMED CONSENT

Consent form to participate in a research study

TITLE OF THE RESEARCH PROJECT:

PERCEIVED PERCEPTIONS OF REGISTERED NURSES ON TASK-SHIFTING OF MALE CIRCUMCISION IN PUBLIC HEALTH FACILITIES IN KHOMAS REGION, NAMIBIA

Researcher: Ester N. Mwanyangapo

You are invited to participate in a research study about perceived perceptions of registered nurses on task shifting of male circumcision in public health facilities, Khomas region, Namibia. This leaflet will help you to make an informed decision on whether or not to participate. It is good for you to fully understand why the research is being done and what it involves before you agree to participate. The purpose of the study is to explore and describe the perceived perceptions of registered nurses on task-shifting of male circumcision in public health facilities in the Khomas region, Namibia. Findings from this study are anticipated to provide improved understanding on perceived perceptions and views of nurses on task-shifting of voluntary medical male circumcision, and assist in instigating the necessary support for nurses involved in provision of male circumcision in Khomas region and in turn ultimately improve the quality of care.

If you agree to be part of the research study, you will be asked to participate in an one-on-one semi- structured interviews, that will take 30-45 minutes. Participating in this study is fully voluntary. There is no compensation of any kind involved. No physical, spiritual, emotional or social harm is involved in this study. The study is ethical bound therefore issues of anonymity; confidentiality and freedom will be ensured at all time.

You have the right to withdraw at any time if you wish to do so or refuse to answer question if you like without any penalty.

If you have questions about this research study, you may contact

Ester N. Mwanyangapo:0812367931

I agree to participate in the study

---------- **----------**

Signature **(Optional)** **Date**

ANNEXURE G: LANGUAGE EDITING CERTIFICATE

Dr.GM

The Rev. Dr. Greenfield Mwakipesile
ThD, MBA, HBS | mwakipg@outlook.com

CONTACT

PO Box 99539,
UNAM,
Namibia

LANGUAGE & COPY-EDITING CERTIFICATE

3rd December 2022

RE: LANGUAGE, COPYEDITING AND PROOFREADING OF ESTER N. MWANYANGAPO's THESIS FOR THE MASTER OF NURSING SCIENCE DEGREE OF THE UNIVERSITY OF NAMIBIA

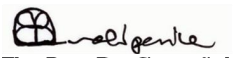
This certificate serves to confirm that I copyedited and proofread **ESTER N. MWANYANGAPO's** Thesis for the **MASTER OF NURSING SCIENCE DEGREE** entitled: **PERCEPTIONS OF REGISTERED NURSES ON TASK- SHIFTING OF MALE CIRCUMCISION IN PUBLIC HEALTH FACILITIES IN THE KHOMAS REGION OF NAMIBIA**

I declare that I professionally copyedited and proofread the thesis and removed mistakes and errors in spelling, grammar, and punctuation. In some cases, I improved sentence construction without changing the content provided by the student. I also removed some typographical errors from the thesis and formatted the thesis so that it complies with the University of Namibia's guidelines.

I am a trained language and copy editor and have edited many Postgraduate Diploma, Masters' Thesis, Dissertations and Doctoral Dissertations for students studying with universities in Namibia, Zimbabwe, Eswatini, South Africa and abroad. I have also copy-edited company documents for companies in the region and abroad.

Please feel free to contact me should the need arise.

Yours Sincerely,



The Rev. Dr. Greenfield Mwakipesile

greenfield.mwakipesile

@mwaking

+264813901701

Dr. Greenfield Mwakipesile