ASSESSMENT OF KNOWLEDGE, ATTITUDE AND PRACTICES OF MALE ADULTS REGARDING THE UPTAKE OF HIV COUNSELLING AND TESTING IN OPUWO DISTRICT, KUNENE REGION, NAMIBIA.

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ABSTRACT

Human Immunodeficiency Virus (HIV) voluntary counselling and testing (VCT) are one among the different approaches implemented to curb the spread of HIV infections and minimise the impact on individuals and families. VCT are considered effective strategies in risk reduction among sexually active individuals, hence, the involvement of men in HIV services is critical to ensure the success of such services. Efforts by government and civil society organisations to get more men involved in HIV services in Namibia over the years have yielded little benefits.

This research focused on determining the knowledge, attitudes, and practices of male adults regarding the use of VCT services in Opuwo District, Kunene Region, in Namibia. Data were collected in Opuwo town, Otuzemba and Katutura locations. The aim was to determine the role played by the male adults' knowledge, attitudes, or practices in the uptake of HIV testing. The purpose of this research was to appraise the level of knowledge, attitude, and practice of VCT and to determine their association with demographic data on HIV uptake of the male adults in Opuwo district.

The study employed a descriptive cross section study, method was used to select the respondents from a population which was done from September to November 2019**.** The simple random sampling of men aged between 15-50 years and above. The sampling formular used was EPI-INFO version 7 with a confidence interval of 95% and a power of 80%, which gave a sample of 113 participants. Data were gathered from 113 participants using a structured questionnaire that was distributed by the researcher and with the help of two people. The theoretical framework that was utilised in this study was the Health Belief Model, which submits the way beliefs guide individual actions and the process that people go through to change their behaviour The study was guided by ethical principles of beneficence, principle of respect for person and principle of justice. The research sought to determine the degree of knowledge regarding attitude and

consumption of VCT services by male participants. The association between the data of the participants and other variables was tested using a Chi square.

The participants in the study were men who had an average age of 30years. While 95.5% of the participants were knowledgeable about HIV/VCT, 60% had a negative attitude towards VCT, and 60% of the participants had never tested for HIV. The fear of positive results, stigma and discrimination, and confidentiality of test results if they were positive was reported as the main barrier for VCT uptake among men.

Arguably, if male participation in accessing VCT services is to be enhanced, VCT programme should reduce, HIV stigma and improve access and trust towards VCT in the district. Other possible interventions are the setting up of regular home-based VCT programmes and the mainstreaming of HIV Testing Services in community development programmes. The chi-square test showed that the type of occupation has an influence on the knowledge of HIV. Finally, the study concluded that outreach programmes that target the testing of men should be encouraged or introduced by Community Based Organisations, and the Ministry of Health and Social Services.

Keywords: Attitude; Knowledge; Practice; Voluntary Counselling and Testing.

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LIST OF ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immunodeficiency Syndrome
ART	Antiretroviral treatment
ARV	Antiretroviral drugs
CDC	Centres for Disease Control and Prevention
DSP	Directorate of Special Programmes
HBM	Health believe model
HCT	HIV Counselling and Testing
HIV	Human immunodeficiency virus
HTS	HIV Testing Services
KAP	Knowledge Attitude Practice
MOHSS	Ministry of Health and Social Services
NAMPHIA	Namibia Population-based HIV impact assessment
NDHS	Namibia Demographic Health Survey
NSA	Namibia Statistic Agency
NSF	National Strategic Framework

PICT Provider Initiated Counselling and Testing

PLHIV People Living with HIV

PMTCT Prevention of Mother to Child Transmission

STI Sexually Transmitted Infection

TB Tuberculosis

TPT Tuberculosis Preventive Therapy

UN United Nations

UNAIDS United Nations Programme on HIV/AIDS

UNICEF United Nations International Children's Emergency Fund

VCT Voluntary Counselling and Testing

WHO World Health Organisation

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DEDICATION

This study is dedicated to my husband, Ueresa Katundu, and my children, Jozikee and Hivirikee Tjipundi, Maisoruijani and Ovandje Katundu, who were my source of inspiration and continually provided emotional support. Let this accomplishment be a source of encouragement for your future studies.

DECLARATION

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CHAPTER 1

ORIENTATION OF THE STUDY

1.1 Introduction

Globally, voluntary counselling and testing (VCT) for Human Immunodeficiency Virus (HIV) forms a central part of the efforts to prevent new infections. Despite the efforts to reduce infection using VCT services, the use of these services by men remains very low. Testing is also important for providing care and support to people living with HIV (UNAIDS, 2019). It is for that reason that viral suppression among men living with HIV, in the age range of 25-34 years is at a very low level. In Namibia, the number of men who secures VCT services and who receive treatment remains very dismal when compared with surveys that were done in other countries which have a high prevalence rate of people living with HIV. This trend implies that there is a challenge of suppressing new HIV infections in the country.

The challenges that men face in accessing VCT and HIV counselling services are not confined to Namibia only but are common in many countries. UNAIDS (2017) noted that although it may be difficult to generalise across cultures and geographical settings, it appears that globally more men than women are likely not to know their status and are therefore likely to suffer morbidity from diseases that can be prevented, or which are HIV related. The same source also observes that health services are not amicable to young men. UNAIDS (2017) also added that the tendency for men not to seek help is a

common practice in developed countries such as North America and developing countries such as Malawi. In Malawi 12% of the men are less likely to know their HIV status than women, and 20% of the men are less likely to have a viral load that is repressed than women. At a global level, access to antiretroviral therapy among men in the age category of 15 years and more was at 47%, while for women it was at 60% in 2016 (UNAIDS, 2017). In eastern Europe, Central Asia, Latin America, and western and central Europe the figures in terms of access to antiretroviral therapy were almost at parity. In China and Ethiopia, the men were less willing to get tested or to access VCT services than the women (Xu, Ma, Chu, Chen, Miao, Xia, & Zhuang, 2020).

Furthermore, Conserve, Muessig, Maboko, Shirima, Kilonzo, Maman, and Kajula (2018) note there has been a huge growth in HIV services in the last 10 years. Despite this increase, in Tanzania, for instance, the number of males who access these services remains very low, when compared to the women. A survey that was done in Tanzania between 2016 and 2017, titled 'Impact Survey' showed that the number of males who knew their HIV status was 45%, while it was 56% for women. The same survey also showed that 86% of men who were HIV positive were on ART treatment, while 84% of them were virally suppressed. These figures seem to suggest that once men become aware of their HIV status, they tend to start accessing treatment to attain the viral suppression. This means that it is important to accelerate testing of men to attain the 90-90-90 targets among men and minimise new HIV infection.

The World Health organisation (WHO, 2016) released a basic framework to guide HIV Self-Testing (HIVST) and announced that this could be a new harmonising way of testing for HIV which may increase the use of testing services for men. WHO (2011) also aptly notes that numerous men who are HIV positive are not aware of their status. Consequently, very few men are likely to access treatment care or support services. It is for this reason that men are more vulnerable to HIV related morbidity and mortality. Another reason to account for the difference in numbers of men and women who access testing services is that this service is provided through antenatal programmes. This means that the antenatal services have not been beneficial to men, although it has helped women to access services easily. The situation is further aggravated by the negative gender practices which also inhibit men from engaging with health services. Some studies have postulated that men see masculinity as the ability to have power over women and having many sexual partners, use of substances and alcohol, all of which drive new HIV infections.

Men are also conscious of what society expects from them. They feel that if they engage with health services such as testing, society will perceive them as weak. WHO (2016) observed that among all the tests that were done in 2014, the majority, 70% were done by women in both developing and developed countries? It is noted that in several countries in sub-Sahara Africa, males of all ages are less likely than females to know their HIV status. In some countries, there is a vast gap between men and women in knowledge regarding HIV. For instance, in countries such as Burundi, Liberia and Niger

to mention only a few, the chances of men being tested for HIV are very limited, while the chances are even less in countries such as Congo, Gambia and Sierra Leone.

Thus, despite the antenatal services that could also be used to reach male partners of expecting mothers, the testing of the latter is not a widespread practice. In situations where the offer is made to test the partner, it is not normally taken up. WHO (2016) observed that from 2014, many countries both developing and developed have enacted laws in a bid to support the testing of couples for HIV. Although this practice has been promising, in a survey that was done in South Africa in which testing services were availed to couples, there was a 46% increase in males accessing these services. Supporting this view, the same testing service for couples in Nigeria, showed an 84% testing increase (WHO, 2016). Thus, research data shows that men are amenable to being tested when it is done out of clinical settings. This includes the testing that is done at community level, when they are given the opportunity to test themselves and when they can conduct testing at home (Conserve et al., 2018). It appears these different approaches may be effective in helping to get more men tested.

According to WHO/UNAIDS (2016), Namibia still has a high HIV prevalence in the world. In fact, HIV has remained a major cause of mortality and morbidity among adults in Namibia. The 2014 National HIV Sentinel Survey in Namibia indicated that HIV remains a huge health challenge in the country, prevalence rate among the age range 15-46 years was 16, 9%. This is quite alarming for a country with a relatively small population. The Namibia Statistics Agency (2011) reported that the population of

Namibia was at 2,540,905. Currently, the Kunene Region, where this study took place has 12,910 people. Also noted is that Namibia's population is sparsely distributed, thus creating challenges in setting up Voluntary Counselling and Testing (VCT) services. VCT is seen as one of the chief ways in which new HIV transmission can be stopped. It is also one keyway counselees can use to access ART services and care. Additionally, Shipanga, Nauiseb and Kloppers (2018) observe that registering for HIV and AIDS treatment and care late in one's life produces negative health effects. On the contrary, increasing HIV testing and counselling, and care services yields positive results. Arguably, the use of HIV services remains lamentably very low among men in Namibia. Hence, this study intends to examine the knowledge and attitude that determine men's participation in VCT. The goal of VCT is to counsel and give support to individuals and to help them to know their HIV status and make the necessary decisions based on the information they have received. Of concern, this study also notes that the uptake of VCT services remains minimal, not only in Namibia, but at global level as well.

1.2 Background

In the whole world there are about 2.3 million new HIV infections annually, 80% of which are situated in sub-Sahara Africa (WHO, 2016). Despite the huge risk of HIV infection only a third of the adults in sub-Sahara Africa have taken an HIV test and 50% of the people living with HIV, are not even aware of their status (USAIDS, 2016). Arguably, knowledge of one's status is critical for HIV testing and counselling, and

prevention. It is also the starting point for a person to start accessing treatment and support.

In a study conducted by Sharma, Ying, Tarr, and Barnabas (2015) in Ethiopia to determine factors that influence VCT utilisation programmes among adults in Ethiopia, it was established that despite the high HIV burden in sub-Saharan Africa, testing coverage is low, particularly among young adults and men. The same study conceded that adult males are less likely to utilise VCT services when compared with females. The study in Ethiopia utilised demographic data in a cross-sectional study that included males in the age group 15-59 years. The findings of this study revealed that 21,9 percent of males residing in urban areas and 2% who dwell in rural areas in Ethiopia had never taken a test for HIV at a VCT.

Another study was undertaken in Nigeria among University students for the purpose of determining the HIV testing rate as such, the current research seeks to fill a gap in literature by examining the knowledge and attitude that determine men's participation in VCT. It also seeks help in HIV counselling, care, treatment, and support. Among many other factors, extant literature submits that what impedes men from taking part in HIV testing are variables such as fear, stigma, and a mind-set that assume that health services are for women. The factors that also encourage men to be tested include family duties and influence from peers.

In another study, Camlin, et al., (2016) noted that the number of infections in 2013 were 2 million. In addition, according to WHO (2016), HIV -related illnesses and death

remained high. The current study thus argues that the widespread use of the approach to test and treat holds the promise for minimising new HIV transmissions, in the context where there is a general spread of infection. The efficacy of the test and treat approach depends on the use of widespread testing and an increased use of the services such as testing and ART, among the people. This huge potential to test and treat is undermined by the gap that prevails among men and women in uptake of service. This study therefore seeks to assess the reasons for the low use of VCT services among males.

Yamanis, Dervisevic, Mulawa, Conserve, Kajula, Maman, and Sciences (2018) note that in Dar Es Salaam, a study based on data gathered over 11 years showed that only 35% of men had sought HIV testing and 25% knew their partner's HIV status. Another study undertaken in Tanzania identified factors contributing to a low uptake of services as socio-economic status, level of education and age of the respondent.

Manuscript (2018) and Yamanis, Dervisevic, Mulawa, Conserve, Kajula, Maman, and Sciences (2018) asserted that societal factors such as norms and values and the networks or groups might determine men's HIV testing behaviour where the men spend their time. In addition, studies that were done outside sub-Sahara Africa demonstrated positive linkages between peer behaviour and risk sexual behaviours among young people. The risk behaviour that was noted among young people includes irregular use of condoms, early engagement in sexual activities, and involvement in sexually activities that involve many partners. The influence of the peer group had a dominant effect on the

behaviour of young people in Tanzania. It is apparent from the study in Tanzania that more work needs to be done to shape the attitude of young males in HIV.

The National Strategic Framework for HIV and AIDS response in Namibia (2010, 2011, 2015, 2016), asserted that HIV remains the most serious challenge to development in Namibia. According to the National Strategic framework (2016), 23% of deaths are related to AIDS. This indicates that the effect of the pandemic on the Namibian economy is severe, thus affecting many sectors and different generations. Hence, the current study's argument that to counter this threat, it is important to use massive testing and treatment methods.

Using the 2016 statistics, the then Health Minister, Haufiku (2016, p,13) pointed out that Namibia's national prevalence rate stood at 14%, of which Zambezi was the highest-affected region. Hence, the decision to hold the National sentinel survey, with the hope that it would have an impact on the region. Zambezi was followed by Omusati and the two Kavango regions at 17.4% and 17% respectively, and Ohangwena at 15%. The Omaheke and Kunene remained among the lowest-affected regions in Namibia.

According to the Namibia Population-based HIV Impact Assessment (NAMPHIA) 2017 report, the prevalence of HIV2 among adults aged 15-64 years in Namibia was 12.6%, 15.7% among females and 9.3% among males. However, the HIV prevalence peaked at 30.0% among females aged 45-49 years as compared to 26.4% among males aged 50-54 years. The HIV prevalence was higher in women than men throughout the reproductive years, 15-49 years. The disparity was most pronounced among those aged 35-39 years,

with HIV-positive females at 28.4% and males at 14.4%, and among those aged 20-24 years, with HIV-positive females at 6.0% and males at 2.3%. The sites with the lowest HIV prevalence were Opuwo (5.2%), Windhoek Central (6.2%) and Tsumkwe (6.4%). Even so, the Ministry of Health and Social Service Report (2016-2017), indicated that there was a need for improvement in the uptake of HIV testing by men.

Table 1.1 Kunene Regional Statistic Report (Opuwo District Hospital) HIV testing by sex

Year	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017
Female	8663 (70%)	9934 (72%)	9892 (75%)	8992 (75%)	6448 (71%)
Male	3763 (30%)	3811 (28%)	3630 (27%)	3060 (25%)	2577 (29%)
Total	**12426**	**13745**	**13522**	**12052**	**9025**
Tested positive	673 (6%)	568 (4.1%)	589 (4.4%)	475 (4%)	432 (5%)

Table 1.1 shows that in Kunene Region in the period 2013, 70% females were tested while the males were only 30%. The trend remained consistent from 2012- 2016 with more women undergoing HIV testing than males. In 2016/17 the percentage of women who were tested was 71% and the males were 29%. Based on these figures, it is apparent that more women than males use VCT services.

It is noted that although HIV/AIDS activities relating to prevention, treatment and support have been supported by NGOs throughout the entire Opuwo district, it is still doubtful whether the community especially the male adults have the knowledge on

HIV/AIDS related issues. This is because Opuwo district in the Kunene Region has the most marginalised and vulnerable communities due to poor education and strict cultural norms. Most of the men in Opuwo district are marginalised and traditional. Arguably, this contributes to the high polygamous marriages and leads to a high risk of new HIV infections among the community members. The men constitute a significant proportion of persons affected by HIV and a good number of them are also sexually active. Given the benefits of VCT, it is important to determine their awareness and utilization of VCT services, their willingness to undergo testing and pay VCT so that barriers to accessing VCT services can be identified, and interventions planned. Hence, this study's argument that it is vitally important that men are fully involved in the HIV prevention and control strategies. It is against this background that the researcher conducted a study to determine the knowledge, attitude, and practices of male adults regarding the uptake of HIV testing in Opuwo district, Kunene Region, Namibia.

1.3 Statement of the problem

Empirical data shows that low rates of HIV testing, male circumcision, condom use, and limited awareness of HIV, use of ART and engagement in prevention of mother-to-child transmission (PMTCT) to couple counselling among men (MOHSS, 2015). Very few stay long enough on ART treatment.

The researcher worked as a supervisor at Opuwo District Hospital, at the HIV Voluntary Counselling and Testing department (VCT). Opuwo District has the lowest HIV prevalence rate of 5.2% compared to other 21 national Districts (MOHSS, 2018). The

VCT uptake statistics of men compared to the women's at Opuwo District are as follows: **2017**: Female 2690, Male: 583, and **2018**: Female 6014, Male 1354 (MOHSS, 2018). Hence, this observation prompted the need to assess the "knowledge, attitude and practices of male adults with regards to the uptake of HIV counselling and testing at Opuwo district Hospital, Kunene Region". According to Nashandi (2016), men's low-level use of VCT services has a major effect on programmes to reduce new HIV infection, by reducing Mother-to-Child Transmission programmes and Access to ART.

It is also important to note that HIV testing allows people who have tested positive to begin to access ART treatment and to make adjustment in their sexual behaviour. Enrolling early for ART enhances the quality of life and the health of People Living with HIV (PLHIV). A qualitative study in South Africa by Shangani, Naanyu, Mwangi, Vermandere, Mereish, Obala and Operario (2017) revealed that the fear of HIV-related stigma was associated with uptake of HIV testing. Stigma obstructed men and young people from HIV testing and treatment. In addition, Shangani et al., (2017) noted that gays men in poor and middle-income countries were neglected when it comes to accessing care, treatment, and support. The study explored reasons to prior HIV testing among gay men in western Kenya.

According to Nashandi, (2016) measures for dealing with stigma are non-existent. This means that the Ministry of Health and Social Services should put in place strategies that would minimise the fear of stigma. Hence, a critical point pursued in this current study is that, although men educated about the advantages of HIV Counselling and Testing there

are obstacles that continue to impede them from engaging in those services. Continued efforts are thus needed to encourage HIV counselling and testing among men. It is therefore critical to find ways to motivate men to access the services such as VCT.

According to the NAMPHIA (2017), the then Health Minister, Dr Bernard Haufiku, noted that in 2017 alone, more than 3 200 Namibians died from the effects of HIV and AIDS. Most of those deaths included men who were over 25 years of age because many Namibian men then, who were infected with HIV, did not know their status, and were not on ARV treatment.

1.4 Purpose of the study

The purpose of the study was to assess knowledge, attitude, and practices of male adults regarding the uptake of HIV counselling and testing at Opuwo District, Kunene region in Namibia.

1.5 Objectives of the study

The objectives of the study are to:

- Assess the knowledge of male adults about HIV counselling and testing in Opuwo district, Kunene region, Namibia.
- Assess the attitude towards VCT among male adults in Opuwo district, Kunene region, Namibia.

- Evaluate the practices of male adults about VCT in Opuwo District, Kunene region, Namibia.

- Determine the link between demographic data, knowledge, and practices on HIV uptake of male adults in Opuwo District, Kunene region, Namibia.

1.6 Significance of the study

The results from this study will help policy makers in planning effective VCT interventions among Namibian men on how to utilise VCT services. This study further contributes to existing knowledge on early diagnosis and treatment which will decrease premature deaths if people utilize VCT early to know their HIV status, thus reducing the burden on the Ministry of Health and Social Services (MoHSS). In addition, the study will shed light on the factors, which hinder men from utilizing VCT services. This may help the MoHSS and key partners in HIV and AIDS control in the district and to design interventions to address challenges.

This study's findings may be applied to Opuwo district and the entire country, in line with the MoHSS guidelines.

1.7 Delimitation of the study

The study was conducted on individual males aged 15-50 years and above living in the Opuwo District, Kunene Region in Namibia. This means that the study was delimited to the physical geography of Opuwo District and to the stated age category among males and did not include women or people outside that age range.

1.8 Definition of concepts

The theoretical and operational key terms used in this study were defined as follows:

1.8.1 Assessment

Assessment is the process of gathering and discussing information from multiple and diverse sources to develop a deep understanding of what male adults know understand and can do with their knowledge as a result of their daily experience (Bibiana, Emmanuel, Amos & Ramsey, 2018).

Assessment in this study was done through face-to-face interviews with participants who could not read or write, and by using self-administered questionnaires to assess what they know about VCT and how the knowledge reflects their attitudes and practices towards VCT.

1.8.2 Attitude

Briñol, Petty, and Guyer, (2019) described attitude as the most distinctive and indispensable concept in social psychology. Some of the key aspects of attitude are their affective, cognitive, and behavioural content. This means that an attitude may associate an attitude object with affective or emotional reactions, cognition or knowledge, beliefs and thoughts, and intentions or past actions. The respondents' attitudes were assessed using the Likert scale in line with the variables: most males are not comfortable with HIV Counselling and Testing, most males understand the benefits of going for HCT, most males read HCT educational materials, and HCT is very important. HCT should be

available for all individuals who need to know their status (Briñol, Petty, & Guyer, 2019).

1.8.3 Practice

Practices or behaviours are the observable actions of an individual in response to a stimulus. This is something that deals with the concrete, with actions (Abidissa, Tazaebew & Gerbi, 2020). In this study, practice was assessed in line with these variables: have you ever tested for HIV, fear of stigma/ discrimination on result outcome, lack of trust of health workers (confidentiality), multiple sex partners, unwillingness/ ignorance to be tested and confidence of not having HIV.

1.8.4 Voluntary Counselling and Testing (VCT)

Ezunu, E. N., Oguzie, A. E., Aigbokhaode, A., & Ezunu, O. E. (2020). Socio-demographic determinants of attitude towards voluntary counselling and testing (VCT) in Delta State, Nigeria. VCT is the process by which an individual undergoes counselling thus enabling him or her to make an informed choice about being tested for HIV, this decision must be entirely the choice of the individual and they must be assured that the process will be confidential. VCT is an effective strategy for facilitating behavioural change around both preventing HIV as well as getting early access to care and support. More so, this is also instrumental in bringing about behavioural change, reducing unprotected sex, and helping to reduce the incidence of HIV and other STIs. VCT is internationally recognised as an effective and important strategy for both prevention and care of HIV

1.9 Outline of the chapters

Chapter 1: Introduction and Background of the Study.

In chapter one an overview of the study was done. The overview looked at the background to the study, the objectives, statement of the problem and the significance of the study.

Chapter 2: The Literature review.

The chapter gave a review of the literature that was organised in line with the research questions. The theoretical framework that informs this study was also presented.

Chapter 3: Research Methodology

The research methodology employed in this study was presented. The study was based on the quantitative research approach. The population of the study, the sample and sampling methods were discussed. The data analysis methods and research ethics were also outlined.

Chapter 4: Research results.

Data presentation was done in this chapter.

Chapter 5: Discussion.

The discussion of the research results was done in this chapter.

Chapter 6: Conclusions, recommendations, and suggestions for further studies.

1.10 Summary

This chapter provides a background of the research and the research problem. In addition, the research process (statement of the problem, purpose of the study, objectives, and rationale for the study) was discussed to give the reader an overview of the study. The statement of the problem clarifies the need to assess the knowledge, attitude, and practices of male adults in Opuwo district in the Kunene Region, regarding the uptake of HIV counselling and testing. The key terms used in the study were defined. The next chapter presents a review of the literature on use of VCT services among men not only in Namibia, but globally.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter examines literature related to HIV infection and male involvement in voluntary counselling and testing (VCT). The review is entirely based on the analysis of existing research articles as well as research reports on the subject matter. The review of literature focuses on the origins of VCT services, and all the information gained over the years. The research explores the extant literature on the topic, with particular focus on the use of VCT services by men.

This research will seek to build on work that was already done and seek to create new knowledge that might have been overlooked in previous studies. The review includes an overview report on previous scholarly research about knowledge, attitude, and practices of male adults worldwide, and the historical perspective of VCT. There are two main ways in which counselling, and testing are done. The first is counselling that is done requested by the client and the second is the counselling that is initiated or started by the service provider.

The chapter also analyses the three components of VCT which encompass counselling, testing and not divulging information about clients to other people, what is termed confidentiality. In this chapter, theories that are appropriate to the study were used to shed more light on and appreciate the attitudes and practices of males who are adults and

practices regarding the use of VCT services. A model that is appropriate to the study of HIV counselling was submitted.

2.2 A Global overview of male knowledge, attitude, and practices towards VCT and HIV testing

UNAIDS (2016) states that worldwide, men who were 15 years and above, were HIV positive and were using antiretroviral therapy stood at 47%, while the women were 60%. The figures show a marked difference in Central Africa regarding the practices of men and women in seeking antiretroviral therapy. UNAIDS (2016) added that in Western and Central Africa, 25% of men were utilising antiretroviral therapy, while for women the figure was 44%, thus indicating a disparity in favour of women. The differences in accessing antiretroviral therapy were also hugely varied in Asia, Pacific, and Central Asia. It is for this reason that men are more vulnerable to HIV morbidity than females. The gap was much wider in sub-Sahara Africa, where 53% of men die from HIV related diseases than females even though they make up 43% of people living with HIV (Hlongwa, Mashamba-Thompson, Makhunga, &Hlongwana, 2020). Areas where the differences between males and females were minimal included Latin America, western and central Europe, and North America.

Hlongwa et al., (2020) noted that HIV testing among men remains insignificant when compared with HIV testing among women in the world in general and in sub-Sahara Africa. Even though Sub-Sahara Africa remains an area that is highly impacted by HIV, men do not utilise test services offered by VCT centres, and they do not embrace

antiretroviral therapy. Men tend to get tested late and, in this way, expose women to HIV infections, and those men who have sex with other men. Detection of the HIV virus during the infant stages helps to initiate access to therapy drugs and helps to reduce the risk of infection to other parties. To combat this challenge, where males do not access VCT in significant numbers, several initiatives were introduced in sub-Sahara Africa such as the introduction of testing of at home and testing of partners. Couples testing is done at antenatal clinics to help improve the rate at which men secure testing. Self- testing was also mooted to help increase the uptake of males to HIV testing services.

2.2.1 Male Knowledge towards VCT

Eremie and Kennedy (2016) refer to a study that was done in Nigeria among university students. The study which sought to determine the knowledge among males and females regarding students in voluntary counselling and testing was conducted at the University in River State, in Nigeria. The study employed Student Perception of Voluntary Counselling and Testing (SPVCT). The findings showed that female students' knowledge of use of VCT was higher than that of male students in a significant way. Similar observations were made in attitude towards VCT, where females' attitudes were higher than that of the males. The trend is also observable in use of the VCT, where women used this service in a more significant manner than the males. The same study observed that 60% of female students had visited VCT twice during their stay at the university, while 42% of male students intimated that they had visited to the VCT. Of

these males, 22 % indicated that they had not visited a VCT due to the concerns about the probable result that they could get. The students in the same study were asked to indicate if they would visit a VCT if it was easily accessible, and 80% of the females asserted that they would, while 65% male students asserted that they would visit the VCT if it was accessible.

2.2.2 Males' attitudes towards VCT

Hlongwa, Mashamba, Thompson, Makhunga, and Hlongwana (2020), gathered data from numerous studies that were done between 1990 and 2018 on barriers that impeded men from using HIV testing services. Thirty-five articles were selected for this study and the conclusion was that males were impeded from testing because of the phobia of testing positive, dread of the stigma that would result from testing positive, places that were used for testing, and their view of masculinity which shaped their attitude towards HIV testing.

Men were reported as displaying an attitude of lack of confidence in the HIV test (Kurth, Larry, Choko, Inwani, & Fortenberry, 2015). A study that was conducted in Uganda showed that among the male participants only, 23% had been tested for HIV, and of these, only 96% went back to secure their results.

Nyondo-Mipando, A. L., Kumwenda, M., Suwedi-Kapesa, L. C., Salimu, S., Kazuma, T., & Mwapasa, V. (2021). noted that, although positive strides have been registered with HIV testing, men are disproportionately affected in the uptake of HIV services and

have fewer avenues for HIV services, unlike women who are further advantaged with the availability of PMTCT services that prioritizes their access to HIV services

2.2.3 Males' practices towards VCT

UNAIDS (2016) asserted that in sub-Sahara Africa, 20% of men and boys were less likely to be aware of their HIV status than females, and 27% were less probable to seek antiretroviral therapy than females. Most males when asked if they would tell their wives about their HIV status, they indicated that they would. Since men occupy a key position in the family, this means that their decisions regarding testing can impact the wife.

Nyondo-Mipando et al.,2021, stated that, men are passive in health seeking, resulting in limited contact with health services, which contributes to the lack of prioritization and uptake of health services.

Chimoyi, Tshuma, Mulongo, Setwe, Sarfo and Nyasulu (2015) in a study that was done in South Africa among the commuters in Johannesburg, noted that several testing initiatives have been designed in sub-Sahara Africa to help people to secure testing services. Some of these initiatives include initiatives that are organised by a service provider, services that are offered at a community level, services offered to couples and traditional counselling services. The challenges that were noted among male practices were that men utilised the testing services less due to constraints related to access of testing services, issues of confidentiality and the dread of stigma which limits not only the capacity of people to get tested and to access services that can help such as

antiretroviral treatment. Male participants displayed apathy and lack of confidence in the outcome of the results of HIV testing.

2.3 Barriers and strategies to enhance male utilization of HIV testing services

According to Sharma, Barnabas and Celum (2017), men who reside in the sub – Sahara region in Africa are resistant to take part in HIV services either in the form of accessing VCT or seeking counselling services. This has negatively impacted the programmes to contain the spread of HIV, and those providing care. The factors that have affected the way men access the services offered at VCT include remoteness of the facilities that offer care and support, the time that the services are offered, and the stereotypical thinking that the centres are intended to offer services to women. Man is also affected by other variables such as lack of financial resources, they experience a negative stereotype when they try to access the services, and the cultural belief that real men do not seek help. In the sub-Sahara African context, men are perceived as breadwinners and they tend to fear being associated with the stigma of HIV, which may affect their ability to work for their families.

The differences in the way men and women access help and support at VCT influences the life expectance between men and women who are HIV positive, with a 10-year difference in favour of women. The fact that very few men are willing to be tested implies that they leave their partners vulnerable to HIV infection. One strategy that has been utilised to increase the use of VCT testing services for men was the introduction of mobile testing services that are termed HIV Testing Centre (HTC). Males prefer this

testing service compared to the practice where they must go physically. The VCT have employed this HTC in Tanzania and Zimbabwe where it is called Project Accept and has had a success rate of 44-53% response. The percentage of people who normally attend VCT was placed at 4-9% at traditional testing centres, which is a very low rate. This means that Project Accept narrows the gap between genders in terms of testing and use of VCT. Community initiatives have also helped to improve male participation in testing, at times showing very positive results in about two weeks (Sharma, Ying, Tarr, & Barnabas, 2015).

Allegri, Agier, Tiendrebeogo, Louis, Mueller, and Sarker (2015) noted that although there has been an increase in testing VCT services in sub -Sahara Africa, the gap between genders in terms of accessing these services remains visible. Survey research that was done in Sub- Sahara Africa (SSA), showed that 12% of women and 7% of men had accessed VCT services for testing purposes. The central point is that men's use of HIV testing is important because as leaders of homes, men lead in decision-making process and in the management of the resources at home, especially when it comes to making decision at home that impacts on women (Allegri, et al., 2018).

To increase the number of men who use VCT services, organisations such as TACAIDS, UNAIDS, Country Team, Benjamin Mkapa Foundation (BMF) and other stakeholders have implemented a plan dubbed Catch-Up Plan to raise access to and use of VCT by men and boys. The goal of this programme was to raise awareness among men of the interventions that are readily available for them to use. Some of the interventions that

were designed include self-testing services (HIVST). The purpose of HIVST is to increase the number of men who access VCT services. There is a belief or perception that HIVST, which creates an opportunity for men to do self-testing, may work better for those males who are reluctant to go to established centres. World Health Organisation (WHO) in 2016, published the rules for the use of HIVST, and advised that it is an approach that has the potential to reach men who are reluctant or unwilling to access services that are on offer (Conserve, Muessig, Maboko, Shirima, Kilonzo, Maman, & Kajula, 2018).

Conserve et al. (2018) also asserted that women had a greater possibility than males to utilise Voluntary Counselling and Testing of HIV. The minimal use of VCT services, could be a result of males that were not completely engaged in HIV prevention programs, creating a situation where it was difficult for them to become aware of their HIV status. The observation that men are slow to respond to VCT services echoes the result of another study that was done in Ethiopia on women. Another study in Western Uganda yielded similar results that males were not utilising VCT services at the same rate as women and they shunned programmes designed to reduce HIV transmission.

In Namibia, the number of people who suffer from HIV is quite high, ranging up to 20 % of the population. Most of the infections that were recorded in Namibia occurred through intercourse between men and women and in cases of mother to child transmission. The (MohSS, 2015) declared that the number of people who are living with HIV, in the age group 15-49 years is about 16% and the overall number of people

living with HIV above the age of 15 years is about 260,000. The number of people, who are living with HIV was anticipated to rise and exceed 273,000 in 2017 and to exceed 296,000 by 2020. It was also expressed that the new infections were approximately 11,000 from 2010 until 2014. In the same timeframe, the number of females who were HIV positive was anticipated to remain higher than that of males.

MoHSS (2015) says that 14% of adults in the age range of 15-49 years and 50-64 years are HIV positive. The number of people living with HIV in the age range of 15-49 years was 16, 9% for females and 10, 9% for males. There was a sharp rise in HIV cases for the 35-39 years age range for both genders; and in the case of females, the number is 30.9% and 22.6% for males. The age range with a low of HIV infection is the age group 15-24 years for both males and females. For females, the prevalence was about 25-6, 4 for females and 2, 0-3, 4% for males (MoHSS, 2015). Based on the above information, this study argues that HIV Counselling and Testing may be the most appropriate point to start interventions such as treatment and to focus on curbing new infections. Overall, although there have been significant interventions such as care and testing in Namibia, there are still vulnerable groups that are still open to HIV infections.

The Namibia Demographic Health Survey (2013) asserted that the number of women in the age range 15-49 years who were found to be living with HIV were 49%, and the number of males in the same age range were 38%. Notably, stigma remains a major hindrance to people accessing testing services for HIV. There are also challenges in collecting reliable data on gay men and categories such as sex workers because they

constantly move from one place to another (MOHSS, 2015). The National Science Foundation (2019) further notes that a survey that collected the data on the spread of the epidemic and on the social status of respondents indicated that men were more exposed to the risk of HIV infection than women. In the same vein, men continue to have a low level of uptake of condoms, limited knowledge of HIV and very few of them are registered on the use of ART. This low-level use of VCT services contributes to high percentages of males who die early, especially among males who are living with HIV.

The chief drivers of HIV have been identified as those with many partners, sex work, sex between young women with older men, among others. The government of Namibia's strategy has been to seek ways to rectify the drivers by using testing services and voluntary circumcision of males (VMMC). The government also intends to increase the use of condoms by raising awareness, use of Pre-Exposure Prophylaxis (Prep) and the rapid provision of care and treatment for sexually transmitted infections (STIs).In addition to the issues already mentioned, it was noted in the NSF (2018) report that there are obstacles that hinder men from receiving care and support such as erratic effort when accessing health services, the common practices where older men engage in sex with younger men, ways in which society defines male and female roles in society, cultural practices that allow many partners as normal and challenges that people face when accessing services that are found in the health provision system.

Planned interventions were targeted at raising awareness of HIV, use of VMMC, HIV Testing Services (HTS) and Anti-Retroviral Therapy (ART) services, increases services

in areas that have high HIV prevalence, encouraging use of VCT services and increasing care and support for pregnant women, engaging community to build their capacity to deal with issues related to HIV transmission and also male health and resolving the cultural norms and practices and transforming public policy related to cultural practices that are negative, engaging communities on issues related to sexual practices and cultural norms and traditions.

2.4 Theoretical Framework - The Health Belief Model

In this part of the literature review, a behaviour change model is explored to appreciate ways in which new HIV transmission can be reduced. The study employed the Health Belief Model (HBM) that seeks to explain how people's actions are motivated by their beliefs and attitudes (Cao, Chen, & Wang, 2014). This model is employed to understand the behaviour and attitudes of people in many studies, especially those that are related to health issues such as HIV transmission and change of behaviour and attitude. Rosenstock (1974) contends that people's worldview about health issues, the value that people see when acting in a particular way and the ability to act in an independent and confident manner helps to explain why people may seek medical help. To change the behaviour of people with HIV so that they seek help requires a change in the stimulus that makes them respond negatively. Such a change would make them change their behaviour and attitude so that they may begin to seek help.

Glanz, Rimer, and Viswanath (2015) state that several studies were conducted to unpack the beliefs of adolescents, and their worldview especially of risks posed by HIV,

and of testing to reduce the risk of exposure to infection. The HMB model assumes that people make health related decisions based on the degree of the risk they are facing. Glanz,at al., (2015) assert that the way people respond to health issues depends on four key factors, namely, the degree of risk they think they are facing in getting the disease, the manner in which they think the risk is great, and the manner in which they think there are benefits and obstacles that they think stand in their way. Recently, a fifth factor, sel efficacy was added to the list.

Many researchers have demonstrated that behaviour change may be attained in areas such as the prevention of mother to child transmission and the use of condoms to prevent mother to child transmission using the HBM. However this model has not been employed in research related to the youth and the use of HTC testing centre. This model is explained below where the key terms and concepts are discussed. These key terms shed more light on the HBM for one to better understand it.

P**erceived susceptibility** This implies the perception a person has regarding the chance of contracting a disease or a health condition (Glanz, Rimer, & Viswanath, 2015). In the case of HIV, it is when the male and adults believe that the degree of risk from unprotected sex, GBV or intergenerational sex is real, and they may even begin to think about ways of addressing these challenges. If the males or youth perceive the risk as real, they can begin to effect behaviour change. Those who think they are not at risk may not affect behaviour change because they do not see the benefits of doing so. A perception of risk may lead to behaviour change such as use of condoms, taking HIV

test or approaching health practitioners for information or support. Action such as male circumcision and limiting one's partners are a result of perception of risk and benefits that may accrue due to behaviour change.

Research that was done in Ghana in 2018 showed that less than 50% of the respondents thought they were at risk of getting HIV infection. The study showed that there is greater possibility of people using a condom if they embrace that HIV is a real threat to their health. As such, according to Kennedy (2018), a low perception of risk may explain less numbers of males who may want to use the service (Kennedy, 2018).

Perceived severity: Implies the view or beliefs a person has regarding the degree of risk if one does not adopt certain health adjustments (Glanz, Rimer, & Viswanath, 2015). People make decisions considering the possibility of contracting the disease, and the consequences such as death or disability or social impacts. This assessment can provide the cue that is needed to effect change.

Research that was conducted in the United States showed that the respondents knew of the risk of HIV and the risk of infecting others. Most of the respondents making up 73% indicated that HIV was a risk condition that has an impact on them. In place of the perception of severity being a major risk for them leading to behaviour change by getting a test, the respondents opted not to be tested due to fear of knowing their HIV status. One participant commented about her peers saying, "It's not like they don't want to. They're probably scared of the outcome, probably, because they know that they have

a risk of catching something they don't want to have" (Schnall, Rojas, & Travers, 2015.p25).

Perceived Benefits Even: The perceived benefits refer to how a person assesses and forms an opinion regarding the importance of forming a new behaviour to reduce the risk of contracting a condition such as HIV. For people to adopt a new behaviour, it is important for them to have confidence in the new behaviour, such as the use of condoms or circumcision, as a solution for reducing HIV transmission. It is a perception that the action taken can lead to a better outcome. If a person goes for a test and then notices that the outcome is negative, it may bring about behaviour adjustments that help to protect them from HIV. People who visit a testing centre and secure an outcome that is HIV positive may be referred to a place where they can receive support and care.

In research that was done in the US, Schnall, Rojas and Travers (2015), show that many of the respondents indicated that they would take an HIV test, because the knowledge of their status would help to secure care and support. The respondents also indicated that it was important to secure a test to avoid unknowingly spreading the virus to others. In addition, the study reflected that 70% of the respondents agreed strongly that when they realise that they are HIV negative, they would be more secure in their relationships, and would not put their partners at risk. The respondents had knowledge that HIV, can impact both partners, and they admitted that undergoing a test would help to enhance safe relationships. For this reason, the respondents admitted that regular testing would help people to be secure, by knowing their status and acting in a responsible way.

Perceived barriers: Glanz, Rimer, and Viswanath (2015) assert that barriers are the most important factors in predicting if behaviour change will occur. Perceived barriers are the way a person looks at the challenges that prevent them from embarking on behaviour change. Barriers can be concrete or non-physical. The concrete barriers can be financial factors, absence of transport or challenges with finding childcare services. The non–physical aspects can be psychological, for instance emotions of fear or fear of embarrassment. That is why some people believe using a condom as a barrier and regard it as synonymous to eating sweets with a cover. Hence, the need to explore ways to eliminate these barriers by emphasising the importance of condom use to prevent STIs.

In another study on Voluntary Counselling and Testing, Schnall, et al. (2015) highlighted some of the major barriers identified by adolescents. The barriers included: the opportunity to get a test and to secure the outcome of the test, the impact of a test on a relationship, and the discomfort that is related to the draw of blood. Some of the young people indicated the obstacles that they faced in securing a test include fear of stigma that could be placed by friends on noticing that they went for a test. Young people were also worried about the issue of confidentiality, where information regarding the outcome of their tests gets to their parents or guardians.

Modifying variables: The constructs in HBM are affected by four factors such as Demographic, Age and level of education, Knowledge, and Attitude and Practices.

Cues to action - are occurrences that may lead to a motivation to crave for change.

It is a thought that instigates action such as the use of condom, having one sexual partner after witnessing a friend or family member suffering from HIV or opportunistic infection.

Self-efficacy: Sel**f-**efficacy refers to a person's belief regarding skills or competencies that a person must deal with life challenges (Bandura, 1997). For behaviour change to work, as stated in the HBM first assertions, people must become uncomfortable with their present behaviour configuration and believe that a transformation of a given nature can generate an important outcome at a stated cost. The individual must also believe that they have the skills to defeat any obstacles that they perceive to act for a new behaviour pattern.

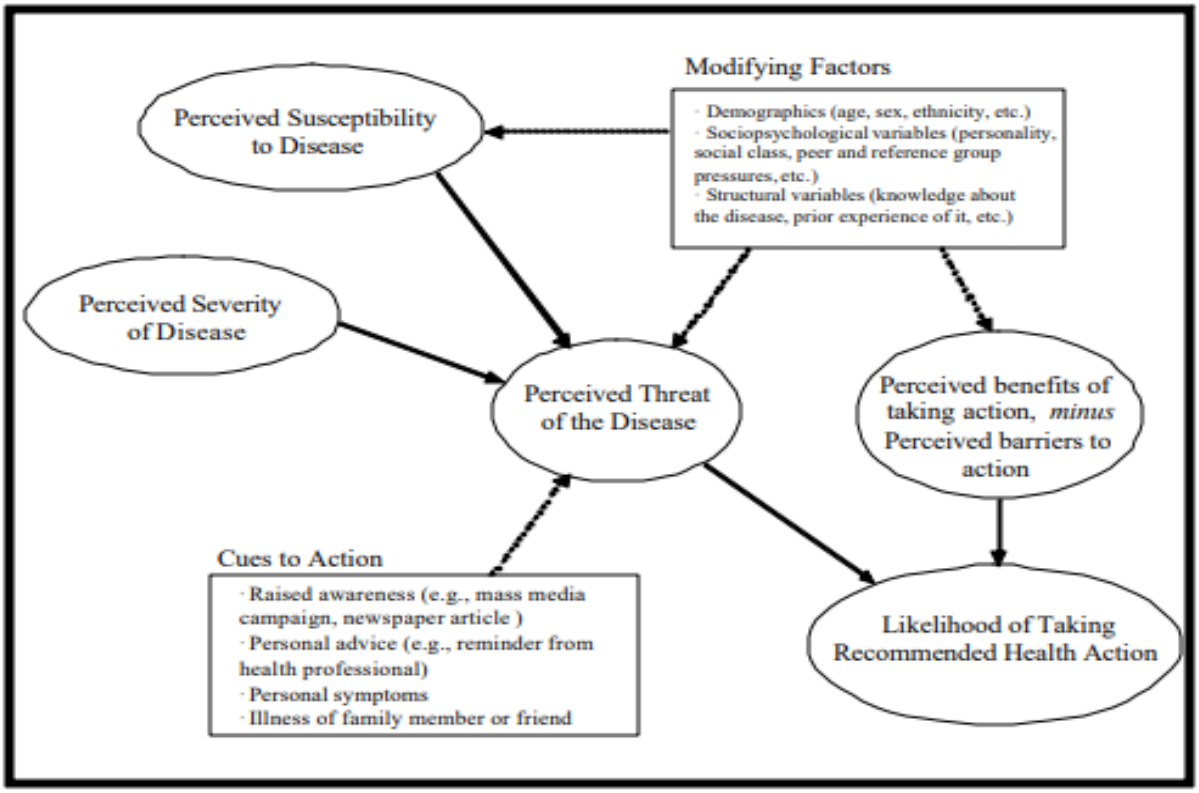

Figure 1.1 The variables in the HBM. Adapted from Rosenstock (1974) and Glanz, Rimer & Viswanath (2015).

2.4 Male testing, behaviour patterns and practices in Namibia and around the world

A study carried out at Arusha City, Tanzania by Sanga, Kapanda, Msuya, and Mwangi (2015) revealed that 97.6% of the respondents strongly concurred that VCT services are vital for the prevention of new HIV infections and, 98.9% concurred that it is vital to go to a VCT for testing. Regarding attitude towards VCT, 81.4% respondents stated that it is vital to go to a VCT for HIV testing to know one's health status, protect oneself from HIV infection and plan for a future life. The number of respondents who were willing to

take a test for HIV were 75.9%. The percentage of people who had been tested in the past for HIV was 61.8%. Among those who had used VCT, 74% were satisfied with the counselling service. The number of respondents who were satisfied with counselling services being offered at VCT, was 74%. Several reasons were offered for not using VCT, namely, concern about stigma, fear of coming out as HIV positive, and the refusal of a partner to go for testing. However, the fear of positive results, fear of stigma and discrimination, partner and self-trust, and partner refusal were the reasons given for not attending VCT services by 84.1%, 58.7%, 14.8% and 4.8% of the respondents, respectively. In a different study, the Namibia Demographic Health Survey (MOHSS, 2013) revealed, "62% women had adequate knowledge of HIV 51% men had insufficient knowledge. It was also established that young men were more likely than young women to report having multiple sexual partners in the 12 months preceding the survey".

A similar study by Nakakuwa, Mitonga, De Velliers, and Ipinge, (2018), demonstrated that HIV/AIDS knowledge was low as shown by 15,8% of the respondents who indicated knowledge of HIV testing, while 70% had never taken an HIV test among the Himba people in Kunene Region, Namibia. The same study also noted that 64% of the participants secured information on HIV from health workers, while 21% secured knowledge about HIV from friends as a main source of guidance. The number of participants who indicated family members as a source of information was only 3%. Other areas of information that 12% of the people utilised to get knowledge about HIV, were newspapers, religious gatherings, radios, and community leaders.

About practices and HIV 4.97% of male participants indicated that they were sexually active and the number that admitted to engaging in extra marital affairs was 73%. The participants who conceded to engaging in sex without protection was 56%. The number of participants who were aware of the risk of contracting HIV was 56% and 42% were not aware of the risk. The participants were asked if they had been tested for HIV and most of them constituting 70% indicated they had never been tested. The participants were also asked to indicate if they were able to negotiate safe sex with their partners and 69% had done so. In addition, 64% knew a place where they could get condoms in their local area, while 67% of the respondents were willing to use a condom during each sexual encounter (Nakakuwa et.al., 2018). Finally, concerning attitude towards HIV/AIDS, the study showed that 49% were willing to go for HIV testing and counselling, while another 49% indicated that they were not willing to take a test.

The participants were also asked if they had received or heard about HIV messages in the previous year, 71 answered positively. The respondents were also asked to indicate if they were willing to share their test results with relatives if they were HIV positive, and 72% of the respondents agreed that they would share their results. The number of respondents who were willing to provide care to a person living with HIV was 68%. Of the respondents, 50% stated to that they were prepared to share cups or meals with someone who is HIV positive, and more respondents showed they had no struggles with stigma when it comes to interacting with people who are HIV positive.

2.5 The elements of VCT

In this section the components of VCT are explored. There are several components of a VCT and HIV intervention approach. Each of these components are central to the VCT and HIV, provision of VCT services.

2.5.1 HIV counselling and testing

According to the Ministry of Health, Kenya (2015) HIV testing guideline, the term HIV testing services (HTS) is used to indicate the full range of services that a client is offered together with HIV testing. This includes counselling (pre and post testing); linkage to appropriate HIV prevention, care and treatment services and other clinical support services; and coordination with laboratory services to support quality assurance and delivery of correct results.

According to the Namibia Demographic Health Survey (2013), among the people who were tested in 2012, for HIV prevalence for people in the age group 15-49 years, the number of positive males was 38% and for females, it was 49%. The figures showed a significant increase when compared to the figures for 2006/2007 where people who had tested positive were 29% females and 18% males (MOHSS, 2015). HIV counselling is a process where the client engages in conversation with a person or group of people, for instance at family level, to help make well informed decisions. The people have access to HIV and counselling services who would like to know their status. HIV counselling assists people to make decisions and to plan their lives. HIV tests are divided into components such as Pre-test, which occurs before a person is tested, preparing them for

the test; the testing phase and the final phase is the post-test counselling. In Post-test counselling, if a person is HIV positive, they receive on-going care and support. The following segments expand on these three segments.

2.5.2 HIV counselling and testing approaches

2.5.2.1 Client initiated HIV Testing

Client-initiated HCT refers to a situation in which a person goes out of their way to obtain a service for HIV testing. It is when a person is made aware of their status and the counselling that follows the results, at times leads to a change in behaviour (Ashipala et.al., (2018).

2.5.2.2 Provider-initiated counselling and testing (PICT)

A service provider may also initiate counselling by health care staff who may suggest that a person take an HIV test as a normal part of their professional help and functions to the client. The test that is done at the suggestion of a service provider is critical in the sense that it could save lives. Service providers at a hospital may suggest that expecting mothers take an HIV test, or in the delivery ward or before undergoing an operation an HIV test may be requested (Ashipala et.al., (2018).

2.5.2.3 Voluntary testing

HIV testing may have many meanings for a person undergoing the test. It is a very stressful moment even though there are many merits in a person securing their HIV

status. Conversely, numerous people see any HIV positive test as a death penalty. There are many incidences of discrimination against people who divulge their HIV status to family members or friends. It is for this reason that HIV testing must be done by a person who wants the service without being coerced (WHO/UNAIDS, 2010). As such, informed consent is a key component before carrying out any HIV testing procedure to clients. HIV testing facilities provide a service that is confidential and allows people's identities to be safeguarded.

2.5.3 Confidentiality in HCT

At the beginning of a counselling session, a client is promised that the information shared in the session will not be shared with a third party. This means that the information obtained from a counselling session must be kept secure from any other people.

This promise to handle information with confidentiality helps to build trust between the counselee and the counsellor. In some cases, the counselee may permit their counsellor to share information on their status to a few individuals if it is a case of shared confidentiality of counselling of couples.

Despite the assurance where the counselee is assured that the information shared will be handled with confidence, there are many instances where the counselee accuses the counsellor of a breach of trust. Although many of the patients living with HIV have confidence in the ARVs therapeutic treatment, the major hurdle they face is the fear of being known by other people that they are HIV positive and the stigma that may arise in

such instances. The breach of trust by health workers may be divided into confidential or non-confidential (Jonathan & Kondjo, 2016).

2.5.3.1 Pre-Test counselling in HCT

The pre-test counselling involves giving information to a counselee or patient on HIV risk assessment, consent, and test preparation. The pre-test counselling can be done at the request of the counselee, which is called Client Initiated Testing and Counselling (PITC) or may be done at the request of the counsellor, which is termed Provider Initiated Testing, and Counselling (PITC). For the CITC, pretesting enables an individual to understand the benefits of knowing one's status, prepare and consent for HIV testing, and understand the HIV process and the risk that may be obtained because of HIV infections. Through the CITC, clients are in a position to understand the importance of disclosure to partners and other family members. They can also know the post-test services that include referrals (NASCOP, 2015).

For the PITC, pre-testing enables providers to give information for HIV testing, to explain HIV testing process, to discuss with the clients the importance of disclosure to health providers and to share with the client the available post testing services.

`2.5.3.2 Post-Test counselling in HCT

Post-test counselling is provided usually immediately after the HIV test. It involves giving information on how to reduce risk, interpret positive or negative results, communicate, and disclose information to partners. The clients who test HIV- positive

are offered care, treatment and support that is available to people living with HIV (NACOP, 2015).

2.6 The benefits of VCT

There are benefits that are derived from getting an HIV test. One benefit involves the decision a person can take regarding practising safe sex or to effect behaviour change in order to reduce the risk of becoming HIV positive. Getting an HIV test also gives clients access to many services that are meant to reduce the risk of HIV or reinfection. Some of the services that are made available to clients after testing are drugs that stop an expecting mother from infecting a child before birth (PMTCT), and male circumcision which reduces the risk of contracting HIV. Awareness of one status also helps to begin to access ART.

Getting an HIV test is helpful in providing emotional support for the people who are living with HIV. It helps the people living with HIV to cope with emotional and psychological challenges that arise due to knowing one's status. Some of the benefits of HIV testing include the following:

- Makes one able to make decisions regarding parenting like for instance the care of a child or children.
- Can result in sexual practices that reduce the risk of infecting others or getting reinfection.
- Reduces the risk of HIV transmission to unborn children.

- Inform decisions regarding family size and use of contraceptives.
- Allows one to start accessing treatment timely and also to receive care.

2.6.1 Access to medical care

Numerous medical strategies, which can reduce the suffering among people who are living with HIV, and which can reduce the mortality rate are available. Many of the people living with HIV, although they may be receiving ART treatment, they may still face several challenges such as tuberculosis which needs early screening to offer timely intervention.

2.6.2 Tuberculosis (TB) screening, treatment, and TB preventive therapy (TPT)

Tuberculosis (TB) is a major cause of mortality for people living with HIV. The intervention that is done to reduce mortality and morbidity from TB, is to administer TB preventive therapy, which collaborates with ART to alleviate pain and reduce the risk of premature death. Over the years (TPT) has become a standard for the treatment of TB in many countries for over 10 years. It is critical that TB be eliminated globally by ensuring that many people who contract it receive timely intervention in the form of treatment. People who are living with HIV are likely to contract TB.

2.6.3 Co-trimoxazole prophylaxis

Co-trimoxazole is used as a preventive therapy for people who are HIV positive. The use of con-co-trimoxazole decreases death rates that arise from opportunistic infections. It is

therefore utilised to treat opportunistic infections among people who are living with HIV (WHO/UNAIDS, 2010).

2.7 Research Gap

HIV voluntary testing is viewed as a key to the prevention of new HIV infections in any country. In this study, it was noticed that in many countries that men do not utilise VCT services to the same degree as women. It was also noted that men are motivated by numerous factors that impede them from accessing voluntary testing and counselling services. Many studies that were done and analysed in this study analysed the attitudes of men towards voluntary testing in urban areas, and in institutions of higher learning. There is no study that was undertaken in rural areas in Namibia, specifically in Opuwo, Kunene Region to determine the attitudes and knowledge of men towards HIV testing and access to VCT. Hence it has never been assessed, is contributing to the body of knowledge. It is this gap that this study seeks to fill by undertaking this study in a rural setting in Namibia, among the people who reside in an area called Opuwo.

2.8 Summary

This chapter has reviewed different issues related to HIV infection but more specifically, male involvement in (VCT) voluntary counselling and testing. In this chapter, the literature related to the topic was analysed. The theoretical framework that undergirds the study was also discussed. The study utilised the Health Belief Model as a theoretical framework. This theory explains the way beliefs guide individual actions and the process that people go through to change their behaviour. The behaviour of men towards testing

was also explored. It was noticed than men are less likely to seek health related information or to go for an HIV test for fear of stigma.

The chapter also discussed the three elements of VCT, which are, HIV counselling and testing, confidentiality, and pre-post-test counselling. The merits of seeking an HIV test early were also examined. The stages of counselling were examined, and the importance of utilising confidentiality was explored. The next chapter looks at the research methodology that was used in this study.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

The chapter presents and discusses the research methodology employed in this study. Hence, the research design that was utilised in this study to address the research questions was explored. The population of the study was defined, and the sample and sampling procedures were discussed. Finally, the chapter looked at the tools used to collect data, the way the data was analysed and the research ethics that guided the process.

3.2 Research design

A research paradigm provides a philosophical overview that shapes the research. This study employed the quantitative research paradigm. Levy (2017) conceptualised a research design as displaying a short version of the steps for conducting the study, which include the when, from whom, and under what conditions the data will be obtained. A research design helps to submit a plan that can be used to collect data in an appropriate way. For this study, a cross-sectional descriptive, analytical and correlational design was utilised to analyse the association, and to quantify the relationship between or among the variable's knowledge, attitude and practice of male adults aged between 15-50 years and above at Opuwo District, Kunene Region.

The cross-sectional research design was employed in this study because it yields prompt results, and it doesn't consume a lot of finances (Levy, 2017). Furthermore, the cross-sectional research design provides data when studying an association between many variables. It is also an ideal way of determining the prevalence of a situation. In this study, the research sought to investigate knowledge, attitudes, and practices of men regarding HIV testing, and the cross-sectional research design serves as a best tool in displaying the association between knowledge, attitude, and behaviour of men in using VCT services.

3.2.1 Quantitative Research

Quantitative research was used at first in hard sciences such as agriculture. A thinking in positivism shaped the area for quantitative research (Cohen, Manion & Morrisson, 2018). The research is concerned with objectivity and turning of phenomenon into numbers. In this case, the research uses numbers, percentages, and statistics to seek an understanding of a problem. For the current research, the quantitative design was used to assess the existing knowledge of male adults aged between 15-50 years and above, regarding HIV uptake. The preference for the quantitative design is justifiable because it can be used to quantify opinions, attitudes, behaviours, and other defined variables (Creswell & Clark, 2018).

3.2.2 Descriptive cross-sectional design

A descriptive cross-sectional study that involves quantitative methods was conducted in Opuwo District. According to Setia (2016), in a cross-sectional study, the investigator

measures the outcome and the exposures of the study participants at the same time. The participants in a cross-sectional study are selected based on the inclusion and exclusion criteria set for the study. Once the participants have been selected, the investigator follows the study to assess the exposure and the outcomes. Cross-sectional designs are used for population-based surveys and to assess the prevalence of diseases in clinic-based samples. These studies can usually be conducted relatively faster and are inexpensive. Interviews were conducted using structured questionnaires. The data analysis was done using the SPSS version.

3.2.3 Testing for association

A chi-squared test was used to test for association between the dependent (level of knowledge, practices) and independent (demographic information) variables of the study population.

3.3 Study population and sample

The study population in this research refers to the members of a group of people defined as respondents to whom the research measurements refer by reported results, findings, and inferences (Brink, 2016).

3.3.1 Study population

This refers to a complete set of elements (persons or objects) that possess some common characteristics defined by the sampling criteria established by the researcher (Cohen & Manion, 2018). For this study, the population was the group that was more at risk of

contracting HIV infection, because adolescent girls go out with older men, and come back to their age mates, infecting them in this way. The chances of new HIV infections among the youth will decrease, as the majority will be aware of VCT and its benefits. The study included only male adults aged 15-50 years and above from Opuwo urban area, Otuzemba and Katutura locations. The male adults were selected because they are within the reproductive age group, and they are the future of tomorrow. The total population for this study was 3392 (Namibia Statistic Agency, 2011; 2012).

3.3.2 Criteria for inclusion

The research focussed on the knowledge, attitude and practices of male adults aged 15-50 years and above from Opuwo urban area. Three locations, Opuwo town, Otuzemba and Katutura were chosen. The criteria for selection were based on:

- the age refers to 15-50 years and above
- Physical refers to address (P.O.BOX).
- Mentally unstable refers to a person with mental disorder.
- Location refers to name of the location e.g Otuzemba, katutura
- availability during the period of data collection
- mentally unstable respondents would not have given relevant answers and would not have been patient enough.

3.3.3 Criteria for exclusion

Men that reside outside Opuwo urban were not part of the study, whether they have reached other requirements, because they did not meet the inclusion criteria. In addition, men that only came to Opuwo urban to visit were not included in this study. Men below the 15 years residing in Opuwo urban, respondents that were part of the pilot study, and those that are mentally disabled were equally not included in the study.

3.3.4 Sampling

A sample is a subset drawn from the population (Creswell & Clark, 2018). A population refers to the unit of analysis of a study. Sampling means the process of selecting the subset from the population to obtain data that can be used to answer research questions (Brink, 2016). Sampling involves selecting individual units to measure from the larger population. In this study the researcher used the simple random sampling. The population of men living in the selected study area is 3392 (Namibia Statistic Agency, 2011).

Sampling formula: EPI info 7: Cross-sectional survey. Power of 80%, 95% Confidence interval and ratio of 1(neutral) and a 29% coverage of men tested in Opuwo district according to 2017 statistics. Males were selected using a simple random sample by counting one out of every 10 houses and a man who met the inclusion criteria was selected to take part in the study until the required number of 113 participants was secured from the three settlements listed in table 3.1.

Table 3.1 Sample size

Location Name	**Sample size**
Opuwo town	37
Otuzemba	38
Katutura	38
Total	113

Utilising a random sampling method meant that each of the participants who met the inclusion criteria had an equal chance of taking part in the study (Creswell & Clark,2018).

3.4 Study setting

Kunene region is one of the 14 regions in Namibia. It has a surface area of 144,255 square kilometres and is home to different ethnic groups like Himba, Tjimba, Ovatua, Herero, Damaras and Ovambo. According to the Namibian Population and Housing Census (2011) report, the Kunene Region has a population of 86,856 (Republic of Namibia and Namibian Statistic Agency, 2013). Kunene Region is relatively not developed when compared to the rest of the country. The area has mountains and a dry area and is generally far away from the capital city, which impedes the development of infrastructure. The percentage of women in the age range 15-24 years who were HIV positive in 2016, in Opuwo was 2.9%. Areas that had a high HIV prevalence in the country in the same age group of 15-24 years, were Katima Mulilo which had 20.5% and Rosh Pinah which had 13.8% (MOHSS, 2015).

3.5 Data collection procedure

The study instrument was a self-administered questionnaire which consisted of five segments. Section: A, had the participants' demographic data, Section: B — Knowledge of male adults about HIV VCT, Section: C— Attitudes towards HIV VCT, Section: D— Practices of male adults about HIV VCT, Section: E— Participants' recommendations.

The knowledge of HIV and VCT was determined using a five-section questionnaire which included knowledge about HIV counselling and testing, Voluntary basis of the test, counselling services during the test, places where VCT services are provided, importance of VCT in HIV prevention and care, among others. The attitude towards VCT was also assessed using the questionnaire which included attitude: towards importance of HV screening, the benefits of VCT, importance of reading health information materials, VCT is only for persons who are ill, couples should go for VCT before marriage, using Likert scale, and VCT is only for pregnant women and those who have HIV like symptoms. The practice of VCT was assessed using the questionnaire, which included questions such as: have you ever tested for HIV before, reason for not testing, fear of positive results, lack of confidentiality, ignorance, and multiple sex partners.

Data was collected by the researcher and community counsellors who had been trained for a day on how to use a self-administered structured questionnaire. The researcher and the community counsellors prevented coercion by explaining the purpose of the study to

the respondents and that is voluntary to participate. The research team got access of entry to the house holds by asking permission from the heads of the households.

A pre-tested structured questionnaire was used to collect quantitative data from the respondents. The researcher and the four community counsellors from Opuwo District hospital collected data using structured questionnaires, and assisted respondents who could not read or write to complete the questionnaire. After the completion of the questionnaires, they were put in an envelope and given back to the researcher. Data was collected from the selected population at Opuwo urban at the selected locations. The researcher used questionnaires which had the same set of standard questions; it took plus/ minus 20 minutes per respondent to complete the data collection tool. The data collection ran for one month. The researcher distributed the questionnaires to 113 males aged between 15-50 years and above in the Opuwo District. The selected respondents were guaranteed and assured that upon completion the responses would be kept safely in an envelope and later put in a large black plastic bag or opaque box and locked in a file cabinet. The researcher preferred using the questionnaire since it helps to gather data speedily from a large sample in a short period of time. Hence, questionnaires facilitate the collection of vast amounts of data with minimal effort, and within a short period.

For this research it was also cost effective to administer questionnaires to participants who were assembled in one place. The method was also not as expensive and time consuming as the personal interview. In addition, the users can complete questionnaires at their own convenience, while allowing some time to reflect on their answers.

3.6 Development and testing of the data collection instrument

The design of the questionnaire can affect critical factors such as reliability, or validity or willingness of the respondents to complete it (Cohen & Manion, 2018). For the current study, the researcher used the structured questionnaire. This method was preferred because questionnaires are more objective in nature and can be distributed to many respondents.

The questionnaire for this study was developed by the researcher and prepared in English, which is not the predominant language in the area, but most of the community members residing within the town attended school and can read and write English. Before the actual data collection, it was pre-tested during a pilot study where 10 men were included, and the results were used to improve the phrasing and clarity of the questions. Improvement was made on the questions based on the results of the pilot study (Creswell & Clark,2018).

A brief outline of the different sections of the questionnaire is presented below:

The questionnaire was divided into five sections:

- Part A: Personal data of the participants.
- Part B: Knowledge of male adults about HIV counselling and testing.
- Part C: Attitudes towards VCT.
- Part: D Practices of male adults about VCT.

- Part E: Recommendations.

3.7 Validity and reliability of the research

3.7.1 Reliability

The use of a pilot study of the instrument included conducting the study to males aged between 15-50 years to identify areas for improvement. The pre-testing was done at Onduunjee location, which was not one of the three selected locations, in Opuwo District. The pilot study was used to check the comprehensibility of the questions and the procedures for conducting the study (Creswell & Clark,2018). The information obtained was used to effect changes in the way the questions were structured looking at the following points: demographic data information was inadequate, and the researcher added ethnicity, marital status and religion, comprehension, confidence in response, level of discomfort, and clarified any ambiguities.

3.7.2 Validity of the research

It is important to ensure validity of a research study. Validity is a vital measure of a study variable (Cohen & Manion, 2018). Validity refers to the degree to which a tool precisely measures the variable it is designed to measure, showing the same outcome that indicates the true variable being measured. It shows an appropriate interpretation of scores in a test, which is very significant. This study considered the content validity and face value validity. Content validity was attained by an analysis of studies that sought to address similar topics for regarding attitudes of men towards health issues and going to

VCT for a test. The analysis helped to ascertain that all key areas regarding the data collection were addressed. Validity was also ascertained by ensuring that the questionnaire was adjusted after the pilot study.

3.8 Data analysis

Data was analysed using statistical software. The data was examined to ascertain that it was consistent, accurate and complete. The data was entered into the computer and coding was used to protect the identity of the participants. After the data was captured in a computer, the researcher confirmed the data on the tools to what was entered on the computer (Cohen &Manion, 2018). The data was cleaned, and a software was used to analyse it. The SPSS software was used to analyse the descriptive data and the correlation was tested through CHI square and Fisher's Exact

3.9 Research ethics

Research ethics looks at the way research is done to determine if there is no violation of acceptable principles of conduct. Research ethics provide guidelines that help a researcher to do what is considered appropriate when conducting research (Creswell & Clark,2018). Several research guidelines were considered during this research process, and these included: upholding the rights of the participants, seeking entry into the field, and also adhering to the research guidelines as expounded by the University of Namibia (UNAM) Postgraduate Studies Committee. Appropriate research guidelines were applied to every stage such as construction of the research design, the data collection tools and the way the respondents were treated. In this study consent was obtained by

signing the document from the participants before conducting the study, while minors were consented by their parents to take part in the study.

3.9.1 Permission to conduct research

Permission to do this research was granted by the School of Nursing at the University of Namibia, Windhoek. Secondly, the University of Namibia Postgraduate Study Committee granted the research ethical clearance. Lastly, the Ministry of Health and Social Services Research Ethical Committee and the Opuwo Hospital Regional Director for Ministry of Health and Social Services, granted approval for the research to be conducted. For participants below the age of 18 years, consent to take part in the research study was sought from the parents or guardians. The guardians had to sign a consent form to indicate that they had no objection to their child or boy under their care to participating in the study. Boys under 15 years of age just like the adults were not subjected to embarrassment or pain or pressure in the data collection process in this study.

3.9.2 Principle of beneficence

This ethical principle ensures that the researcher's actions did not subject the participants to any form of harm or discomfort. The researchers were properly trained and mentored before the study to prevent any form of harm to respondents. The respondents were informed of their right to protection from embarrassment or injury. The researcher assured the participants that she could stop the study at any point, if there was noticeable evidence of harm or injury to the participants. The researcher made sure

that there was no physical, emotional, embarrassment or uncomfortable situation during the data collection process (Creswell & Creswell, 2018).

3.9.3 Principle of justice

This principle considers the way the participants are selected for the study. The way the participants are chosen should consider that marginalised groups are not left out deliberately nor ignored during the selection of the participants. The researcher explained to the respondents that they were selected because they were candidates for the problem to be studied. The researcher respected the participants' right to confidentiality. They were assured that their participation would remain anonymous. A code was allocated to the respondents to ensure anonymity. The information was in no way linked to the identity of the respondents at any time during and after the study (Creswell & Creswell, 2018).

3.9.4 Principle of respect for person

The researcher ensured that the participants were made aware of their rights that they could participate willingly or choose to withdraw their consent from the study at any time during the study process. The researcher made it clear that each respondent's identity would be protected during the research process (Creswell & Creswell, 2018).

3.10 Summary

In this chapter, the research approach was discussed. The research approach that was used was quantitative and the research design was cross-sectional. The population of the

study and the sample were also explored. The data analysis was explained as following the quantitative data analysis. The study also highlighted different research ethics that guided this research. Finally, the way this study considered the validity and reliability of the study were examined.

CHAPTER 4

RESULTS

4.1 Introduction

This chapter presents the research findings in terms of the quantitative data and discusses them in relation to the analysed data. The data were analysed using SPSS version. The presentation of the results is presented under the demographic information, knowledge, practices, and attitudes of male adults, regarding the uptake of HIV testing in Opuwo District, Kunene Region. This chapter presents the data gathered in this study based on the research questions that were posed in chapter 1. The study sought to examine the use of VCT services by males in the Opuwo District. The personal data of the respondents was gathered to help to give an overview of personal factors that are linked to the attitudes towards VCT services such as use of condoms, accessing testing for the purpose of decision making in treatment or prevention of new infections. The data was analysed using descriptive statistics. Finally, the recommendation on how HCT should be improved for male adults is analysed in part E. Further analysis is done to find out the association between demographic information and willingness to be tested for HIV. Data was collected from 37 males in Opuwo town, 38 males from Otuzemba, and Katutura had 38 male participants, which gave the response rate of 100%, which attributed to the explanation given before they participated in the study, about the aims and objectives of the study.

4.2 Demographics information of respondents

Demographic information is understood to be the unique attributes of the respondents which have the tendency to distinguish them into different sets of categories. In this study demographic characteristics was included but were not limited to marital status, educational background, age group, ethnic group, religion, and source of information.

In Table 4.1, personal data of the respondents such as age and gender are presented. A total of 113 men, in the age range of 15-50 years participated in this research, of which 15% were adolescents aged 15-19 years and the remaining 75% were adults aged 20-50 years. Of the total participants, 62% were single, 20% cohabiting, 14% married, 4% were divorced and 0% widowers. Concerning the educational status, 51% of the participants had secondary education and tertiary education accounted for 64% of all the participants, 20% had primary education and only 16% had no education. The majority, 75% of the participants identified themselves as Hereros and the Himbas with other tribes, including Ovambo's, Damara and Zembas accounting for 25 % of the participants' education. The total participants, 38% were unemployed, 25% were employed in public services, 18% employed in corporate/big business, 15% self-employed and 4% were students. The study assessed the participants' religious beliefs, of which 58% were traditional believers and 36% were Christians belonging to the Catholic, Pentecostal, and Lutheran churches. Those belonging to other religions were 6 %. The sources of HCT information are also analysed in Figure 5 below. The data shows that about 59 participants, which is the majority, indicated that the main source of

information on health issues is radio. While 24 participants indicated health care providers, 14 of them indicated friends as their source of health information, and seven indicated televisions and five newspapers.

Table 4.1 Demographic Information of the Participants

Demographic Information		
What is your age group? 100% response rate	**Frequency**	**Percent**
15-19 yrs.	17	15.0%
20-24 yrs.	24	21.2%
25-29 yrs.	23	20.4%
30-34 yrs.	16	14.2%
35-39 yrs.	9	8.0%
40-44 yrs.	10	8.9%
45-49 yrs.	10	8.9%
50 + yrs.	4	3.5%
TOTAL	**113**	**100.0%**
The highest level of participants, 99% response rate	**Frequency**	**Percent**
None	18	16.1%
Primary	22	19.6%
Secondary	57	50.9%
Tertiary	15	13.4%
TOTAL	**112**	**100.0%**
Participant marital status, 92 % response rate	**Frequency**	**Percent**
Single	64	61.5%
Married	15	14.4%
Divorced	4	3.9%
Cohabiting	21	20.2%
Widower	0	0.0%
TOTAL	**104**	**100.0%**
Occupation of the participant, 97% response rate	**Frequency**	**Percent**
Student	4	3.6%
Unemployed	42	38.2%
Employed in public service	27	24.6%
Self-employed (small business/subsistence farming)	17	15.5%
Employed in corporate/big business	20	18.2%
TOTAL	**110**	**100.0%**
Which ethnic group do you belong to? 97% response rate	**Frequency**	**Percent**

Herero	53	48.2%
Himba	30	27.3%
Ovambo	10	9.1%
Damara	5	4.6%
Zemba	10	9.1%
Other (specify)	2	1.8%
TOTAL	**110**	**100.0%**
Main source of information on health issues, 97% response rate	**Frequency**	**Percent**
Radio	59	53.6%
Television	7	6.4%
Newspapers	5	4.6%
Healthcare workers/health facilities	25	22.7%
Friends/family members	14	12.7%
Church leaders	0	0.0%
Other (specify)	0	0.0%
TOTAL	**110**	**100.0%**
Religion of the respondent, 95.6 % response rate	**Frequency**	**Percent**
Catholic	16	14.8%
Lutheran	11	10.2%
Pentecostal (new generation churches)	11	10.2%
Traditional believer	63	58.3%
Other (specify)	7	6.5%
TOTAL	**108**	**100.0%**

4.3 Knowledge of male adults about HIV Counselling and Testing

The questionnaire had 10 items and the respondents were expected to indicate if they agreed or disagreed with each of the items stated regarding their attitudes towards use of VCT services. The data sought to identify attitudes of males who may be living with HIV or AIDS to understand their perceptions towards care, treatment, and prevention of new HIV infection.

The knowledge of the respondents is analysed in Table 4.2 below.

Table 4.2 Knowledge of males on HIV Testing Services

Have you ever heard about HIV Counselling and Testing services?	**Frequency**	**Percentage**	
Yes	108	95.58%	
No	5	4.42%	
TOTAL	**113**	**100.00%**	
Do you know that HCT involves individuals who are tested on their own will?	**Frequency**	**Percentage**	
Yes	**97**	**85.84%**	
No	**16**	**14.16%**	
TOTAL	**113**	**100.00%**	
Do you know where HCT services are offered?	**Frequency**	**Percentage**	
Yes	90	79.65%	
No	23	20.35%	
TOTAL	**113**	**100.00%**	
HIV can be transmitted in other ways than sexual intercourse.	**Frequency**	**Percentage**	
Yes	109	96.46%	
No	4	3.54%	
TOTAL	**113**	**100.00%**	
Is HCT important in preventing the risk of HIV infections?	**Frequency**	**Percentage**	
Yes	97	85.84%	
No	16	14.16%	
TOTAL	**113**	**100.00%**	
Knowing the HIV status through HCT empowers the individual to make right choices in life and relationships.	**Frequency**	**Percentage**	
Yes	107	94.70%	
No	6	5.30%	
TOTAL	**113**	**100.00%**	

Being diagnosed with sexually transmitted infection poses a risk for HIV infection.	**Frequency**	**Percentage**	
Yes	**88**	77.9%	
No	**25**	22.1%	
TOTAL	**113**	**100.00%**	
Do you consider the use of condoms a very effective method of preventing STD/AIDS or pregnancy?	**Frequency**	**Percentage**	
Yes	**108**	**95.58%**	
No	**5**	**4.42%**	
TOTAL	**113**	**100.00%**	
HCT involves pre and post-test counselling?	**Frequency**	**Percentage**	
Yes	79	69.91%	
No	34	30.09%	
TOTAL	**113**	**100.00%**	
People should undergo HIV testing at least once in 6 months.	**Frequency**	**Percentage**	
Yes	85	75.2%	
No	28	24.8%	
TOTAL	**113**	**100.00%**	

Table 4.2 above shows that 96% of the participants indicated that they have heard about HCT, while 4% have not heard about HIV testing. While 79.7% know where the HCT services are offered, 20.3 % indicated that they do not know. Approximately, 74 %of the participants stated that people should undergo HIV testing at least once in 6 months while the remaining 25% of the participants stated that they should not.

4.4 Attitudes towards HIV Testing Services (HTS) among male adults

Figure 4.1 below shows the results of the extent the respondents agree to different statements assessing their attitude towards HIV Testing Services (HTS). They are asked to what extent they agree to a range of statement assessing their attitude towards HTS by

selecting the following responses: Strongly Agree, Agree, Not Sure, Disagree and strongly Disagree

4.1. Most Males are not comfortable with HIV counselling and testing

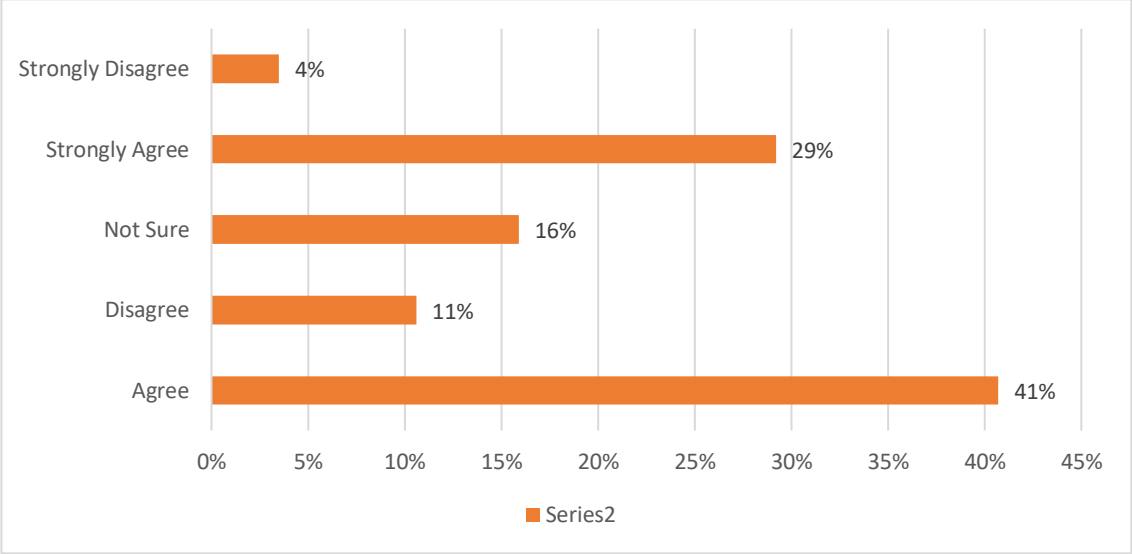

Figure 4.1 Most Males are not comfortable with HIV counselling and testing

- Forty percent (41%) of males agree that most males are not comfortable with HIV
- Twenty counselling and testing. Nine percent (29%) of males strongly agree that most males are not comfortable with HIV counselling and testing.
- While ten percent (11%) of males disagree that most males are not comfortable with HIV counselling and testing.
- And three percent (3%) of males strongly disagree that most males are not comfortable with HIV counselling and testing.
- Where only five teen (16%) of males were not sure that most males are not comfortable with HIV counselling and testing.

4.2. Most males understand the benefits of going for HCT.

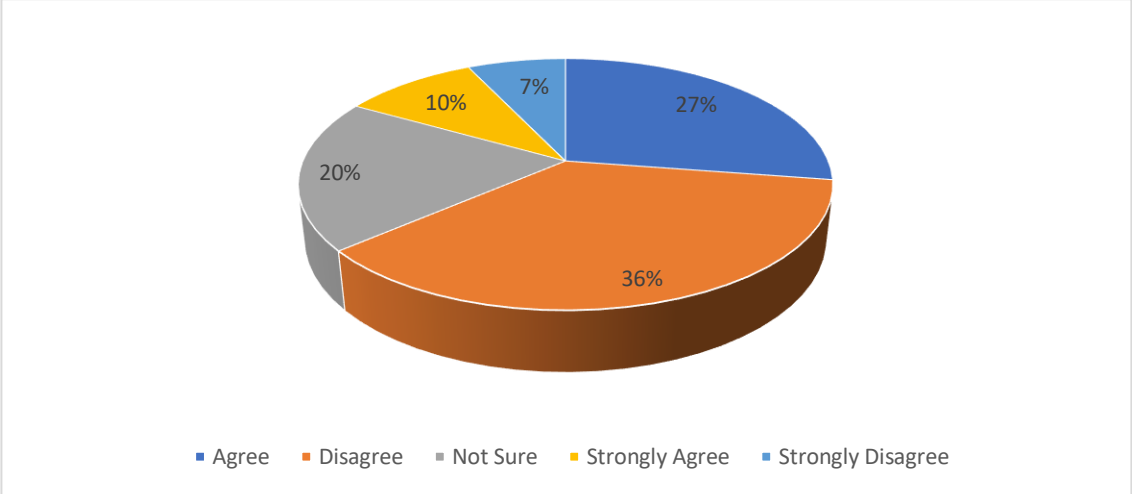

Figure 4.2 Most males understand the benefits of going for HCT.

- Twenty seven percent (27%) of males agree that most males understand the benefits of going for HCT.
- Nine percent (10%) of males strongly agree that most males understand the benefits of going for HCT.
- While thirty six percent (36%) of males disagree that most males understand the benefits of going for HCT.
- And seven percent (7%) of males strongly disagree that most males understand the benefits of going for HCT.
- Where only nineteen percent (20%) of males are not sure that most males understand the benefits of going for HCT.

4.3. Most males read HCT educational materials

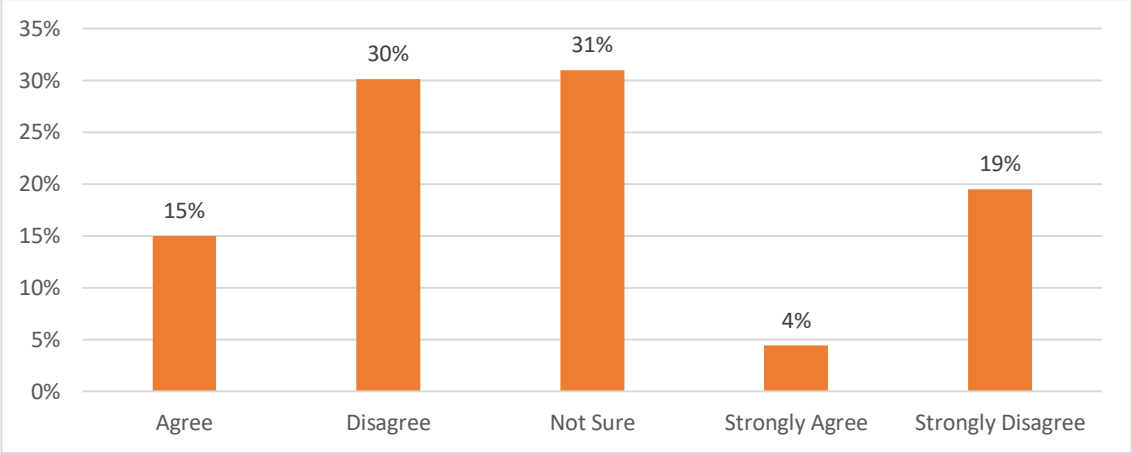

Figure 4.3 Most males read HCT educational materials

- Fifteen (15%) participants agree that most males read HCT educational materials.
- Four (4%) participants strongly agree that most males read HCT educational materials.
- While nineteen (19%) participants strongly disagree that most males read HCT educational materials.
- Where mostly thirty-one (31%) participants are not sure that most males read HCT educational materials.

4.4. HCT is very Important

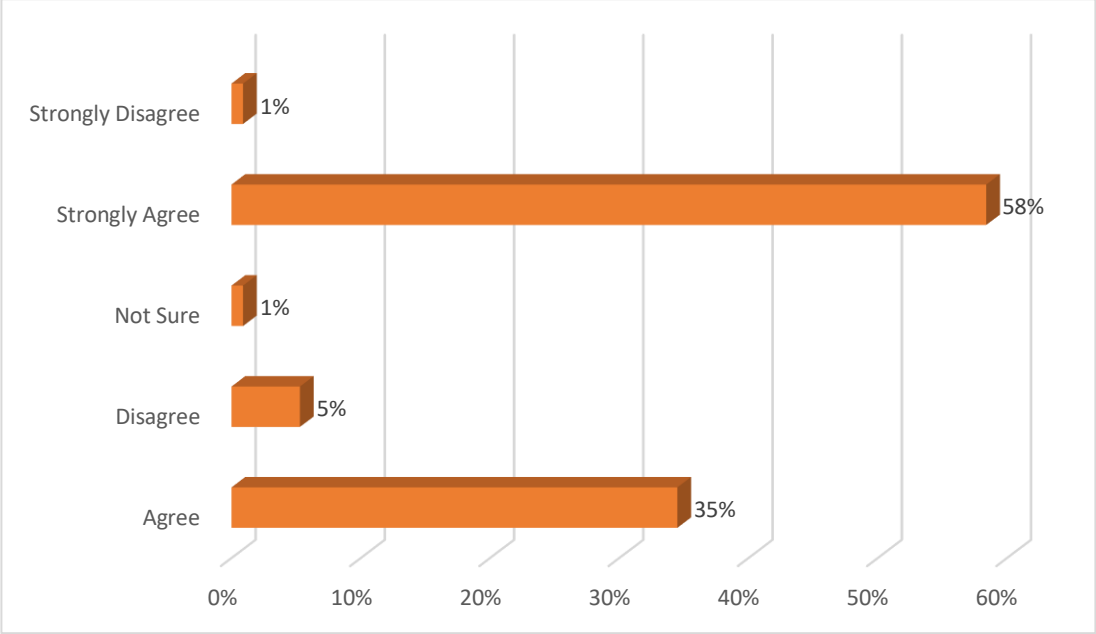

Figure 4.4 HCT is very Important

- Fifty-eight (58%) participants strongly agree that HCT is very important.
- Thirty-five (35%) participants agree that HCT is very important.
- While five (5%) participants disagree that HCT is very important.
- And only one (1) participant that strongly disagree that HCT is very important.
- Where one (1) participant is not sure that HCT is very important.

4.5. HCT is only for those who are ill

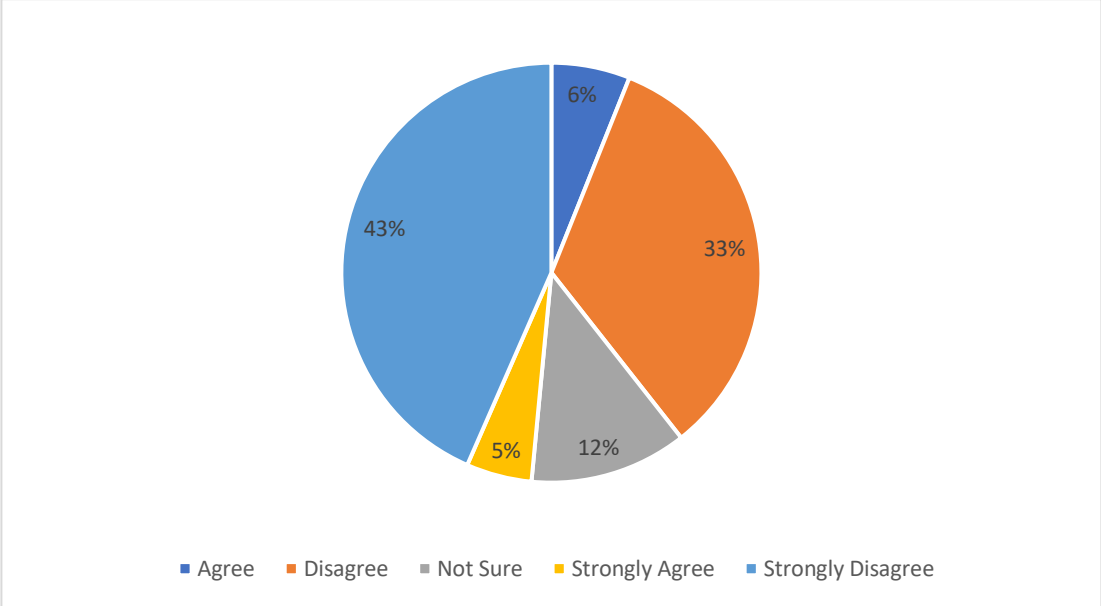

Figure 4.5 HCT is only for those who are ill

- Mostly forty-three (43%) participants strongly disagree that HCT is only for those who are ill.
- And thirty-three (33%) participants disagree that HCT is only for those who are ill.
- Six (6%) participants agree that HCT is only for those who are ill.
- Five (5%) participants strongly agree that HCT is only for those who are ill.
- Where twelve (12%) participants are not sure that HCT is only for those who are ill.

4.6. HCT should be available for all individual who needs to know their status

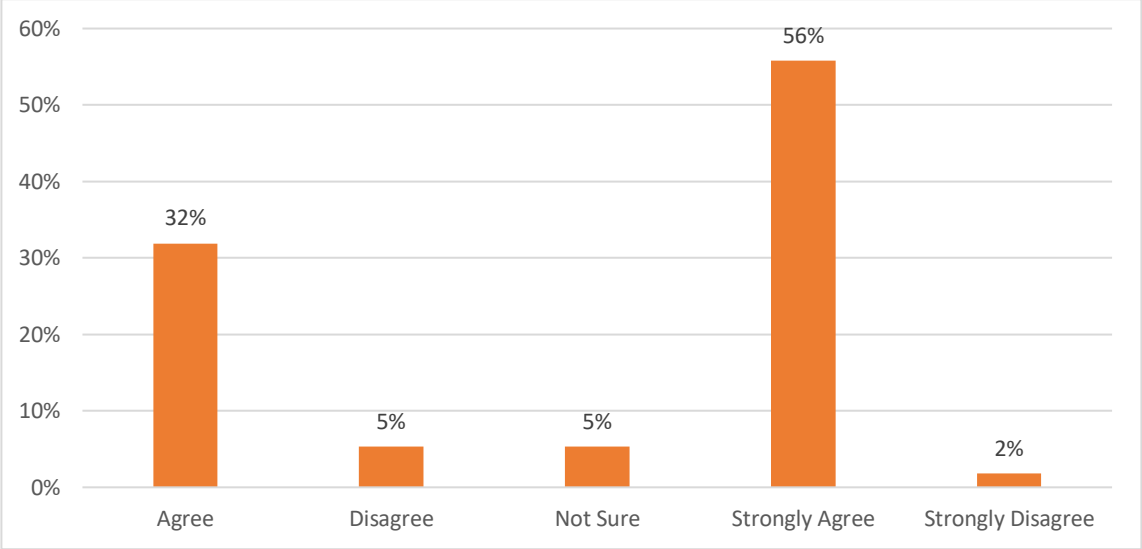

Figure 4.6 HCT should be available for all individual who needs to know their status

- Highly fifty-six (56%) participants strongly agree that HCT should be available for all individual who needs to know their status.
- While thirty-two (32%) participants agree that HCT should be available for all individual who needs to know their status.
- And five (5%) participants disagree that HCT should be available for all individual who needs to know their status.
- Two (2 %) participants strongly disagree that HCT should be available for all individual who needs to know their status.
- And only five (5%) participants are not sure that HCT should be available for all individual who needs to know their status.

4.7. Couple should undergo HIV counseling and Testing before marriage

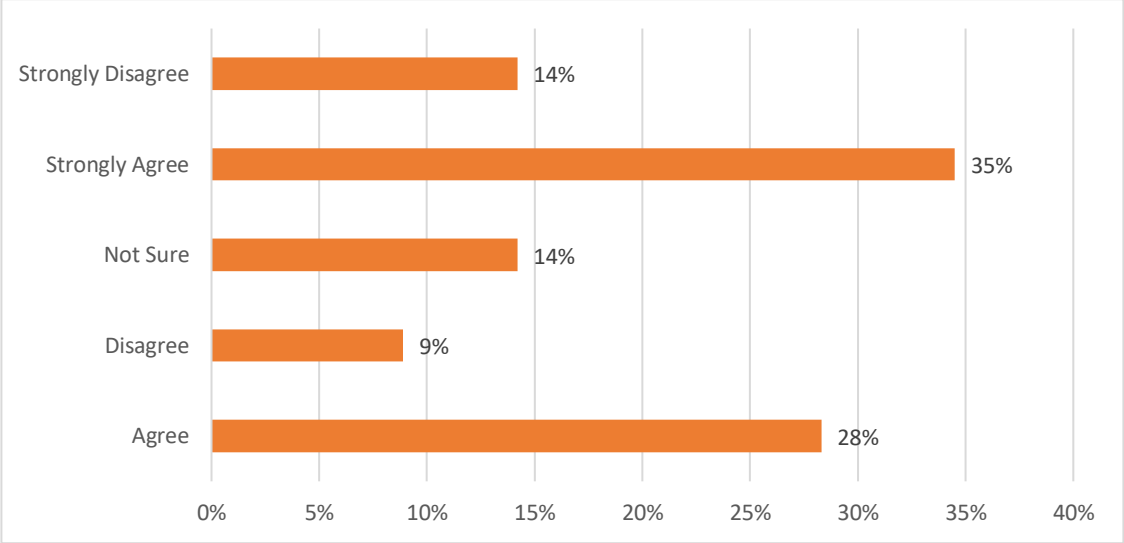

Figure 4. 7 Couple should undergo HIV counselling and testing before marriage

- Thirty-five (35%) participants strongly agree that couple should undergo HIV counselling and testing before marriage.
- Twenty-eight (28%) participants agree that couple should undergo HIV counselling and testing before marriage.
- And four-teen (14%) participants strongly disagree that couple should undergo HIV counselling and testing before marriage.
- Nine (9%) participants disagree that couple should undergo HIV counselling and testing before marriage.
- Where only four-teen (14%) participants are not sure that couple should undergo HIV counselling and testing before marriage.

4.8. HCT is only for pregnant women and those who have HIV like symptoms

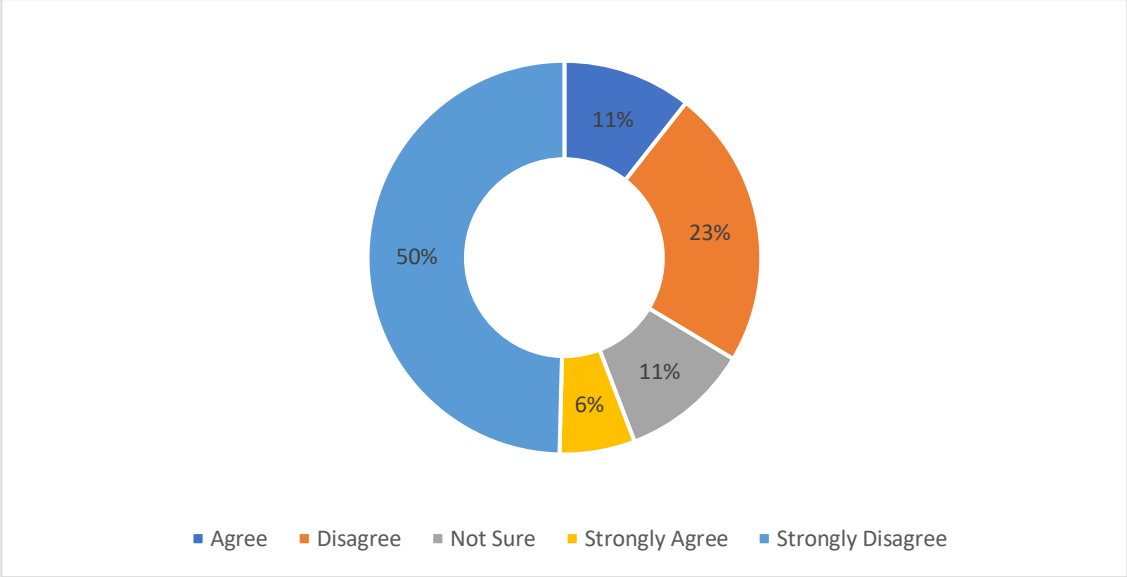

Figure 4. 8 HCT is only for pregnant women and those who have HIV like symptoms

- Fifty percent (50%) of the responses strongly disagree that HCT is only for pregnant women and those who have HIV like symptoms.
- Eleven percent (11%) of the responses agree that HCT is only for pregnant women and those who have HIV like symptoms.
- And twenty three percent (23%) of the responses disagree that HCT is only for pregnant women and those who have HIV like symptoms.
- Six percent (6%) of the responses strongly agree that HCT is only for pregnant women and those who have HIV like symptoms.
- Where only eleven percent (11%) of the responses are not sure that HCT is only for pregnant women and those who have HIV like symptoms.

4.5 Practices of male adults to HIV Testing Services (HTS)

Table 4.3 Practices of males on HIV Testing Services

Were you ever tested for HIV?	**Frequency**	**Percentage**
Yes	46	40.9%
No	67	59.1%
TOTAL	**113**	**100.0%**
Reason for not testing		
Fear of stigma/ discrimination on result outcome	Frequency	Percentage
Yes	97	85.84%
No	16	14.16%
TOTAL	**113**	**100.00%**
Fear of approaching testing centres	Frequency	Percentage
Yes	70	61.95%
No	43	38.05%
TOTAL	**113**	**100.00%**
Lack of trust of health workers (confidentiality)	Frequency	Percentage
Yes	57	50.44%
No	56	49.56%
TOTAL	**113**	**100.00%**
Fear of needles	Frequency	Percentage
Yes	31	27.43%
No	82	72.57%
TOTAL	**113**	**100.00%**
Fear of seeing blood	Frequency	Percentage

Yes	13	11.50%
No	100	88.50%
TOTAL	**113**	**100.00%**
Multiple sex partners	Frequency	Percentage
Yes	67	59.29%
No	46	40.71%
TOTAL	**113**	**100.00%**
Reliance on traditional practices	Frequency	Percentage
Yes	25	22.12%
No	88	77.88%
TOTAL	**113**	**100.00%**
Unwillingness/ ignorance to get tested	Frequency	Percentage
Yes	79	69.91%
No	34	30.09%
TOTAL	**113**	**100.00%**
Confidence of not having HIV	Frequency	Percentage
Yes	66	58.41%
No	47	41.59%
TOTAL	**113**	**100.00%**

Table 4.3 indicates that close to 86% of the participants indicated that men fear stigma/ discrimination while 14% indicated that men don't fear stigma/ discrimination. The fear of approaching testing centres was expressed by 62% of the participants, while 38% indicated that they are fearless. The table also reflects that 50% indicated that they lack

trust in the health workers (confidentiality) and 50% indicated that they trust them. The number of those who indicated an unwillingness or ignorance as reasons for not getting tested was 70%.

4.6 Recommendations

Table 4.4 Participants' recommendations to improve HIV testing and counselling services

Home Based testing	**Frequency**	**Percentage**
Yes	65	57.52%
No	48	42.48%
TOTAL	**113**	**100.00%**
Over the counter home testing kits	**Frequency**	**Percentage**
Yes	21	18.58%
No	92	81.42%
TOTAL	**113**	**100.00%**
Anti-Retroviral Treatment centre also treat opportunistic infections?	**Frequency**	**Percentage**
Yes	70	61.95%
No	43	38.05%
TOTAL	**113**	**100.00%**
To promote workplace and community awareness	**Frequency**	**Percentage**
Yes	47	41.59%
No	66	58.41%
TOTAL	**113**	**100.00%**
Specialised education (To promote early treatment)	**Frequency**	**Percentage**
Yes	54	47.79%
No	59	52.21%
TOTAL	**113**	**100.00%**

According to Table 4.4 the respondents were asked to make recommendations on how to improve HIV testing and counselling service. Respondents were required to answer

"Yes" if they feel the statement is an area of improvement for HIV testing services and "No" if not. All the participants (113) responded to all the five (5) statements. The most recommended area of improvement is the allowing HIT treatment centres to also offer treatment for HIV opportunistic infections.

On the issue of integration of the HIV treatment centre, with other chronic diseases, the majority of the respondents making up 62 % of the participants responded positively. Regarding Home Based testing, 58% of the participants indicated that it is an area of improvement, and the other remaining areas were the least recommended with below 50% participants. Lastly, the over-the-counter home testing kits was the lowest with only 18% participants recommending it.

4.7 Testing for the association between demographic data and knowledge

Table 4.5 Cross tabulation of the age group and do you know that HCT includes individuals who are tested at their will?

100% Response rate			
	Do you know that HCT includes individuals who are tested at their will?		
What is your age group (in years)?	**Yes**	**No**	**TOTAL**
15-19	15 88.24% 15.46%	2 11.7% 12.50%	7 100.00% 15.04%
20-24	21 87.50% 21.65%	3 12.50% 18.75%	24 100.00% 21.24%
25-29	20 86.96% 20.62%	3 13.04% 18.75%	23 100.00% 20.35%

30-34	14 87.50% 14.43%	2 12.50% 12.50%	16 100.00% 14.16%
35-39	7 77.78% 7.22%	2 22.22% 12.50%	9 100.00% 7.96%
40-44	9 90.00% 9.28%	1 10.00% 6.25%	10 100% 8.85%
45-49	8 80.00% 8.25%	2 20.00% 12.50%	10 100.00% 8.85%
50+	3 75.00% 3.09%	1 25.00% 6.25%	4 100.00% 3.54%
TOTAL	97 85.84% 100.00%	16 14.16% 100.00%	113 100.00% 100.00%

Chi-square	**df**	**Probability**
1.4855	7	0.9828
Fisher's Exact		0.9637

Table 4.5 above shows the cross tabulation of the age group and the question do you know that HCT includes individuals who are tested at their will? At 5% level of significance, there is inadequate evidence to conclude that age group has an influence on knowledge of HIV counselling and testing. This is because the P-value of 0.9828 is greater than 0.05 which is the level of significance.

Table 4.6 Cross tabulation of your religion and do you know that HCT includes individuals who are tested at their will?

95.6 % Response rate			
	Do you know that HCT includes individuals who are tested at their will?		
What is your Religion?	**Yes**	**No**	**TOTAL**
Catholic	16 100.00% 17.20%	0 0.00% 00.00%	**16** **100.00%** **14.81%**
Lutheran	8 72.73% 8.6%	3 27.27% 20.00%	**11** **100.00%** **10.19%**
Pentecostal	10 90.91% 10.75%	1 90.09% 6.67%	**11** **100.00%** **10.19%**
Traditional Believer (Holy fire)	54 85.71% 58.06%	9 14.29% 60.00%	**63** **100.00%** **58.33%**
Other	5 71.43% 5.38%	2 28.57% 13.33%	**7** **100.00%** **6.48%**
TOTAL	**93** **86.11%** **100.00%**	**15** **%** **100.00%**	**108** **100.00%** **100.00%**

Chi-square	**df**	**Probability**
5.7099	4	0.2219
Fisher's Exact		0.1425

Table 4.6 above shows the cross tabulation of one's religion and the question 'do you know that HCT involves individuals who are tested at their will?' However, at 5% level of significance, there is inadequate evidence to conclude that religion has an influence on knowledge of HIV counselling and testing as the P-value of 0.2219 is greater than 0.05 which is the level of significance.

Table 4.7 Cross tabulation of marital status and do you know that HCT includes individuals who are tested at their will?

92% Response rate			
	Do you know that HCT includes individuals who are tested at their will?		
What is your marital status?	**Yes**	**No**	**TOTAL**
Single	57 89.06% 63.33%	7 10.94% 50.00%	**64** **100.00%** **61.54%**
Married	12 80.00% 13.33%	3 20.00% 21.43%	**15** **100.00%** **14.42%**
Divorced	3 75.00% 3.33%	1 25.00% 7.14%	**4** **100.00%** **3.85%**
Cohabiting	18 85.71% 20.00%	3 14.29% 21.43%	**21** **100.00%** **20.19%**
TOTAL	**90** **86.54%** **100.00%**	**14** **13.46%** **100.00%**	**104** **100.00%** **100.00%**

Chi-square	**df**	**Probability**
1.3699	3	0.7126
Fisher's Exact	3	0.4932

Table 4.7 above shows the cross tabulation of one's marital status and the question 'do you know that HCT involves individuals who are tested their will?' At 5% level of significance, there is inadequate evidence to conclude that marital status has an influence on knowledge of HIV counselling and testing as the P-value of 0.7126 is greater than 0.05, which is the level of significance.

Table 4.8 Cross tabulation of educational level and do you know that HCT involves individuals who are tested at their will?

99% Response rate			
	Do you know that HCT involves individuals who are tested at their will?		
Level of education completed	**Yes**	**No**	**TOTAL**
None	12 66.67% 12.50%	6 33.33% 37.50%	**18** **100.00%** **16.07%**
Primary	19 86.36% 19.79%	3 13.64% 18.75%	**22** **100.00%** **19.64%**
Secondary	52 91.23% 54.17%	5 8.77% 31.25%	**57** **100.00%** **50.89%**
Tertiary	13 86.67% 13.54%	2 13.33% 12.50%	**15** **100.00%** **13.39%**
TOTAL	**96** **85.71%** **100.00%**	**16** **14.29%** **100.00%**	**112** **100.00%** **100.00%**

Chi-square	**df**	**Probability**
6.7672	3	0.0797
Fisher's Exact		0.092

Table 4.8 reveals the cross tabulation of the level of education completed and the question ‘do you know that HCT involves individuals who are tested at their will?’ At 5% level of significance, there is insufficient evidence to conclude that the level of education has an influence on the knowledge of HIV counselling and testing as the P-value of 0.0797 is greater than 0.05, which is the level of significance.

Table 4.9 Cross tabulation of the Occupation and do you know that HCT involves individuals who are tested at their will?

97% Response rate			
What is your occupation?	**Do you know that HCT involves individuals who are tested at their will?**		
	Yes	**No**	**TOTAL**
Student	4 100.00% 4.21%	0 0.00% 0.00%	**4** **100.00%** **3.64%**
Unemployed	37 88.10% 38.95%	5 11.90% 33.33%	**42** **100.00%** **38.18%**
Employed in public service	26 96.30% 27.37%	1 3.70% 6.67%	**27** **100.00%** **24.55%**
Self-employed (small business/subsistence farming)	11 64.71% 11.58%	6 35.29% 40.00%	**17** **100.00%** **15.45%**
Employed in corporate/big business	17 85.00% 17.89%	3 15.00% 20.00%	**20** **100.00%** **18.18%**
TOTAL	**95** **86.36%** **100.00%**	**15** **13.64%** **100.00%**	**110** **100.00%** **100.00%**

Chi-square	**df**	**Probability**
9.8028	4	0.0439
Fisher's Exact		0.0642

Table 4.9 above reflects the cross tabulation of one's occupation and the question 'do you know that HCT involves individuals who are tested at their own will?' At 5% level of significance, there is enough evidence to conclude that occupation has an influence on

the knowledge of HIV counselling and testing as the P-value of 0.10439 is less than 0.05, which is the level of significance.

Table 4.10 Cross tabulation of Ethnic group and do you know that HCT involves individuals who are tested at their will?

97% Response rate			
	Do you know that HCT involves individuals who are tested at their will?		
To which ethnic group do you belong?	**Yes**	**No**	**TOTAL**
Herero	47 88.68% 49.47%	6 11.32% 40.00%	**53** **100.00%** **48.18%**
Himba	22 73.33% 23.16%	8 26.67% 53.33%	**30** **100.00%** **27.27%**
Ovambo	9 90.00% 9.47%	1 10.00% 6.67%	**10** **100.00%** **9.09%**
Damara	5 100.00% 5.26%	0 0.00% 0.00%	**5** **100.00%** **4.55%**
Zemba	10 100.00% 10.53%	0 0.00% 0.00%	**10** **100.00%** **9.09%**
Others	2 100.00% 2.11%	0 0.00% 0.00%	**2** **100.00%** **1.82%**
TOTAL	**95** **86.36%** **100.00%**	**15** **13.64%** **100.00%**	**110** **100.00%** **100.00%**

Chi-square	**df**	**Probability**
7.3629	5	0.195
Fisher's Exact		0.284

Table 4.10 above reveals that the cross tabulation of ethnic group and the question 'do you know that HCT involves individuals who are tested at their will?' At 5% level of significance, there is insufficient evidence to conclude that one's ethnic group has an influence on the knowledge of HIV counselling and testing as the P-value of 0.195 is greater than 0.05 which is the level of significance.

4.8 Testing for the association between demographic data and practice

Table 4.11 Cross tabulation of the age group and ever gone for HIV counselling and testing

100% Response rate			
	Have you ever gone for HIV Counselling and Testing?		
What is your age group (in years)?	**Yes**	**No**	**TOTAL**
15-19	15 88.24% 13.76%	2 11.76% 50.00%	**17** **100.00%** **15.04%**
20-24	23 95.83% 21.10%	1 4.17% 25.00%	**24** **100.00%** **21.24%**
25-29	23 100.00% 21.10%	0 0.00% 0.00%	**23** **100.00%** **20.35%**
30-34	16 100.00% 14.68%	0 0.00% 0.00%	**16** **100.00%** **14.16%**
35-39	8 88.89% 7.34%	1 11.11% 25.00%	**9** **100.00%** **7.96%**
40-44	10 100.00% 9.17%	0 0.00% 0.00%	**10** **100.00%** **8.85%**

45-49		10 100.00% 9.17%	0 0.00% 0.00%	**10** **100.00%** **8.85%**
50+		4 100.00% 3.67%	0 0.00% 0.00%	**4** **100.00%** **3.54%**
TOTAL		**109** **96.46%** **100.00%**	**4** **3.54%** **100.00%**	**113** **100.00%** **100.00%**
Chi-square	**Df**	**Probability**		
7.2186	7	0.4065		
Fisher's Exact		0.3804		

In Table 4.11, a total of 113 participants responded to this question. Table 14 reflects the cross tabulation of the age group and the 'ever gone for HIV counselling and testing responses. The data shows that 100% of the age groups 20-29; 30-34; 40-44; 45-49 and 50+ years old had gone for HIV counselling and testing. For the age group 20-24 years, 96 % had gone for HIV counselling and testing while 4% never went. For the age group 15-19 years, 88% had gone for HIV counselling and testing while 12% never went. The last age group 35-39 years, 99% had gone for HIV counselling and testing while 11% never went.

At 5% level of significance, there is inadequate evidence to conclude that the age group had an influence on individuals going for HIV counselling and testing as the P-value of 0.4065 is greater than 0.05, which is the level of significance.

Table 4.12 Cross tabulation of your religion and have ever gone for HIV counselling and testing

95.6% Response rate			
	Have you ever gone for HIV Counselling and Testing		
What is your religion?	**Yes**	**No**	**TOTAL**
Catholic	15 93.75% 14.15%	1 6.25% 50.00%	**16** **100.00%** **14.81%**
Lutheran	10 90.91% 9.43%	1 9.09% 50.00%	**11** **100.00%** **10.19%**
Pentecostal	11 100.00% 10.38%	0 0.00% 0.00%	**11** **100.00%** **10.19%**
Traditional Believer (Holy fire)	63 100.00% 59.43%	0 0.00% 0.00%	**63** **100.00%** **58.33%**
Other	7 100.00% 6.60%	0 0.00% 0.00%	**7** **100.00%** **6.48%**
TOTAL	**106** **98.15%** **100.00%**	**2** **1.85%** **100.00%**	**108** **100.00%** **100.00%**

Chi-square	df	Probability
6.4027	4	0.1710
Fisher's Exact		0.1713

Table 12 shows the cross tabulation of one's religion and the 'have ever gone for HIV counselling and testing responses. In total, 108 participants responded to this question. The results show that 100% of the Pentecostal, Traditional Believer (Holy fire) and 'other' religions had gone for HIV counselling and testing. For the Catholics, 94% had gone for HIV counselling and testing while 6% never went. Lastly, 91% of the Lutherans had gone for HIV counselling and testing while 9% had not.

At 5% level of significance, there is insufficient evidence to conclude that the age group has an influence on individuals going for HIV counselling and testing, as the P-value of 0.1710 is greater than 0.05 which is our level of significance.

Table 4.13 Cross tabulation of marital status and ever gone for HIV counselling and testing

92% Response rate			
	Have you ever gone for HIV Counselling and Testing?		
What is your marital status?	**Yes**	**No**	**TOTAL**
Single	62 96.88% 60.78%	2 3.13% 100.00%	**64** **100.00%** **61.54%**
Married	15 100.00% 14.71%	0 0.00% 0.00%	**15** **100.00%** **14.42%**
Divorced	4 100.00% 3.92%	0 0.00% 0.00%	**4** **100.00%** **3.85%**
Cohabiting	21 100.00% 20.59%	0 0.00% 0.00%	**21** **100.00%** **20.19%**
TOTAL	**102** **98.08%** **100.00%**	**2** **1.92%** **100.00%**	**104** **100.00%** **100.00%**

Chi-square	**df**	**Probability**
1.2745	3	0.7352
Fisher's Exact		1.0000

Table 4.13 shows the cross tabulation of one's marital status and the 'have ever gone for HIV counselling and testing question; with 104 participants responding. Of the married, divorced and cohabiting participants, 100 participants indicated they had gone for HIV

counselling and testing, while 97% of those who are single had done so and 3% never went.

At 5% level of significance, there is insufficient evidence to conclude that the marital status has an influence on individuals going for HIV counselling and testing, as the P-value of 0.7352 is greater than 0.05 which is the level of significance.

Table 4.14 Cross tabulation of educational level and ever gone for HIV counselling and testing

99% Response rate			
	Have you ever gone for HIV Counselling and Testing		
Level of education completed	**Yes**	**No**	**TOTAL**
None	16 88.89% 14.81%	2 11.11% 50.00%	**18** **100.00%** **16.07%**
Primary	22 100.00% 20.37%	0 0.00% 0.00%	**22** **100.00%** **19.64%**
Secondary	56 98.25% 51.85%	1 1.75% 25.00%	**57** **100.00%** **50.89%**
Tertiary	14 93.33% 12.96%	1 6.67% 25.00%	**15** **100.00%** **13.39%**
TOTAL	**108** **96.43%** **100.00%**	**4** **3.57%** **100.00%**	**112** **100.00%** **100.00%**

Chi-square	**df**	**Probability**
4.7498	3	0.1911
Fisher's Exact		0.1191

Table 4.14 shows the cross tabulation of the level of education completed and the 'have ever gone for HIV counselling and testing' results. In total 112 participants responded to this question. For those who had completed primary level education, 100% had gone for HIV counselling and testing. There were 98% with secondary level education who also went for counselling and testing, while 2% never went. At the tertiary level, 93% had gone for HIV counselling and testing while 7% never went, and none of the 89% went for HIV counselling and testing, while 11% never went.

At 5% level of significance, there is insufficient evidence to conclude that the level of education completed has an influence on individuals going for HIV counselling and testing as the P-value of 0.1911 is greater than 0.05 which is the level of significance.

Table 4.15 Cross tabulation of the occupation and ever gone for HIV Counselling and Testing

97% Response rate			
	Have you ever gone for HIV Counselling and Testing?		
What is your occupation?	**Yes**	**No**	**TOTAL**
Student	4 100.00% 3.67%	0 0.00% 0.00%	**4** **100.00%** **3.54%**
Unemployed	41 97.62% 37.61%	1 2.38% 25.00%	**42** **100.00%** **37.17%**
Employed in public service	27	0	**27**

	100.00% 24.77%	0.00% 0.00%	**100.00%** **23.89%**
Self-employed (small business/subsistence farming)	17 100.00% 15.60%	0 0.00% 0.00%	**17** **100.00%** **15.04%**
Employed in corporate/big business	19 95.00% 17.43%	1 5.00% 25.00%	**20** **100.00%** **17.70%**
TOTAL	**108** **98.18%** **100.00%**	**2** **1.82%** **100.00%**	**110** **100.00%** **100.00%**

Chi-square	**df**	**Probability**
2.0977	4	0.7178
Fisher's Exact		0.6672

Table 4.15 above indicates the cross tabulation of one's occupation and the 'ever gone for HIV counselling and testing responses. In total 110 participants responded to this question. 100% of the students, those employed in public service, and those self-employed (small business/subsistence farming) had gone for HIV counselling and testing, 98% unemployed had gone for HIV counselling and testing, while 2% never went.

At 5% level of significance, there is not enough evidence to conclude that ethnic group has an influence on individuals going for HIV counselling and testing as the P-value of 0.7178 is greater than 0.05, which is our level of significance.

Table 4.16 Cross tabulation of ethnic group and ever gone for HIV counselling and testing

97% Response rate			
	Have you ever gone for HIV Counselling and Testing?		
To which ethnic group do you belong?	**Yes**	**No**	**TOTAL**
Herero	52 98.11% 48.15%	1 1.89% 50.00%	**53** **100.00%** **48.18%**
Himba	30 100.00% 27.78%	0 0.00% 0.00%	**30** **100.00%** **27.27%**
Ovambo	10 100.00% 9.26%	0 0.00% 0.00%	**10** **100.00%** **9.09%**
Damara	5 100.00% 4.63%	0 0.00% 0.00%	**5** **100.00%** **4.55%**
Zemba	9 90.00% 8.33%	1 10.00% 50.00%	**10** **100.00%** **9.09%**
Others	2 100.00% 1.85%	0 0.00% 0.00%	**2** **100.00%** **1.82%**
TOTAL	**108** **98.18%** **100.00%**	**2** **1.82%** **100.00%**	**110** **100.00%** **100.00%**

Chi-square	**df**	**Probability**
4.6218	5	0.4638
Fisher's Exact		0.5049

Table 4.16 above shows the cross tabulation of ethnic group and ever gone for HIV counselling and testing responses. In total 110 participants responded to this question. 100% of the Himba, Ovambo, and Damara participants, and 98% of the Hereros had

gone for HIV counselling and testing, while 2% had never done so. Then, for the Zemba, 90% had gone for HIV counselling and testing while 10% never did.

At 5% level of significance, there is insufficient evidence to conclude that ethnic group has an influence on individuals going for HIV counselling and testing as the P-value of 0.4638 is greater than 0.05, which is the level of significance.

4.9 Summary

This chapter presented the quantitative data generated by the study. Results of the study were presented in this chapter in the form of the tables figures and pie charts.

CHAPTER 5

DISCUSSION

5.1 Introduction

This study examined the knowledge, attitudes, and practice of male adults regarding HIV testing uptake in Opuwo District, Kunene Region, Namibia. This gender was chosen because they are not accessing HIV testing comparing to women in Opuwo District. The discussion of the results is presented in terms of the demographic factors, knowledge, practices, attitudes, and beliefs about HIV.

In this chapter, the data analysis was done and discussed. The data was presented and aligned to the following research objectives:

- Assess the knowledge of male adults about HIV counselling and testing is adequate in Opuwo District, Kunene region, Namibia.
- Assess the attitude towards VCT among male adults in Opuwo district, Kunene region, Namibia.
- Assess the practice of male adults about VCT in Opuwo district, Kunene region, Namibia.
- Determine the association between demographic data, knowledge, and practices, HIV uptake of male adults in Opuwo District, Kunene region, Namibia.

The findings in relation to these research objectives are presented below.

5.2 Discussions

The measurement of the degree to which males can access VCT services, either to know their status to start treatment or receive and to prevent new infections is very important since men do not normally seek help on health issues. The data for this research were categorised into sub-sections relating to the four research questions above. The discussions in this chapter are based on the research questions that were crafted to determine the awareness of HIV infections and the importance of taking an HIV test by the males in Opuwo District. The discussion also looks at the awareness on the availability and accessibility of the services for HIV testing and counselling in the Opuwo Community. The respondents were asked to declare if people intending to marry should first undergo HCT and most of them concurred, while a few of the respondents indicated that they would not want to go for a test.

5.2.1 Assessment of the knowledge towards VCT among men in Opuwo District

The data in chapter 4 reflects that the participants' knowledge about VCT was very high. The data also reflected that most of the respondents, more than 95. 5%, were aware of the services that were offered by the Ministry of Health and Social Services. This shows that many of the respondents had knowledge of where HIV testing was offered by the ministry, while only 4. 5% lacked that knowledge. The research supports the hypothesis that of Himba people in Kunene Region, Namibia, were 70% of the respondents reported of never been tested for HIV, by (Nakakuwa et al.,2018). Many of the respondents, 85.84%, indicated that they were aware that HIV VCT services were offered to

individuals on a voluntary basis. The percentage of the participants who could identify the place where the VCT services were offered was 79.65%, while 20.35%, were not aware. The participants were also asked to indicate knowledge of how HIV is transmitted, and 96. 64% indicated that they knew that HIV could be transmitted through other ways other than sexual transmission. The percentage of the participants who were not aware that HIV could be spread through other means other than sex was 3.54%. This demonstrates that most of the respondents had the relevant knowledge regarding how HIV is transmitted, while a few of the respondents lacked that knowledge.

The respondents were requested to state if the use of HCT is key to avoiding the transmission of HIV. The percentage that felt that HCT plays a pivotal role in the prevention of HIV from spreading, were 85. while 84% felt that it helped, and 14. 16% felt that it did not help. The respondents were requested to identify the importance of knowing one's status, and the choices a person can make in life after acquiring that knowledge. Whilst 94.50% of the participants indicated that it was critical to be aware of one's status, 5.50% did not see the value of knowing it.

The respondents were asked if contracting an STI makes one susceptible to HIV infection and most of the respondents, 81.48%, indicated that it increased the risk of infection, while 18.52% were not aware of this information. The respondents were requested to confirm if the use of condoms was sufficient to stop the spread of diseases and HIV and most of them, 95.58%, said they were effective and 4.42% said they were not. The responses show that the majority of the respondents were conscious of the

importance of utilising condoms every time they had sex, while a few lacked knowledge on their effectiveness.

The participants were also asked to indicate whether people should be allowed to go for testing once in six months and the majority, 74.31% concurred, while 25.69% did not. The figures show that many respondents knew the value of frequent testing for HIV, while a few lacked that knowledge.

The findings of this study showed that many participants were aware of the centres that offer HIV counselling, and this concurs with literature findings (Leta, Sandoy & Fylkesnes, 2012). The factors that have affected the way men access the services offered at VCT are the remoteness of the facilities that offer care and support, the challenge in terms of time that the services are offered, and the stereotypical thinking that the centres are intended to offer services to women. The issue of confidentiality is supported by another study that stated the need to maintain privacy and to avoid any form of unintended disclosure was an underlying factor among men that determined suggestions for the provision of services. (Nyondo-Mipando et al.,2021).

5.2.2 Assessment of the attitude of men about HIV uptake

The second research question sought to assess the attitudes of males towards VCT. The respondents were asked to indicate if males were not comfortable with testing and 40.7% concurred, while 29.2% strongly agreed. The rest of the respondents were distributed as 3.5% strongly disagree, not sure 15.9% and disagree 10.9%. This

indicates that most of the respondents making up over 60% concurred that many of the men disliked taking the HIV test.

This is supported by research which indicates that most men are reluctant to get tested or to use VCT services. Conserve, et al. (2018) noted there has been a huge growth in HIV services that have been offered in the last 10 years. In Tanzania, the number of males who access services also remains very low, when compared to women. A survey that was done in Tanzania, between 2016 and2017, titled 'Impact Survey' showed that the number of males who knew their HIV status was 45%, while the number of women who knew their status was 56%.

The same survey also showed that 86% of men who were HIV positive were on ART treatment, while 84% of them were virally suppressed. These figures seem to suggest that once men become aware of their HIV status, they tend to start accessing treatment and soon attain the viral suppression. This means that it is important to accelerate the testing of men to attain the 90-90-90 targets among men and minimise new HIV infection.

The participants were also asked to react to the statement that men understand the benefits of going for HCT testing. The data that was collected showed that 27.4 % agreed and 9.4% strongly agreed, 7.1% strongly disagreed, and 19.5% were not sure. The research thus concluded that most men might not be aware of the benefits of HCT. The respondents were asked to react to the statement that most men read HCT materials. The number that strongly agreed was 15% and those who strongly agreed were 4.4%.

The rest of the distribution at 31% was not sure while 19.4% strongly disagreed. The number of respondents who were certain that men read HCT material was less than 50%.

The participants were asked to react to the question that HCT services are only for those that are sick. The responses showed that 6.3% agreed and those who strongly agreed were 4.5%. The percentage that was not sure was 12.5% for those who strongly disagreed was 49%, and the number that disagreed was 4.5%. This means that the number that disagreed that the HCT was for sick people was slightly more than 50%. The data in this study reflected those men had challenges accessing HCT, and NSF (2018) echoed these findings. The data in the study was also similar to other studies showing that those men have poor health seeking behaviours, that the cultural view of masculinity affects their ability to seek, and access health services related to HIV and other opportunistic infections.

The participants were asked to indicate if HCT services should be available to all people who wanted to know their status. The responses showed that 31.9% agreed, 5588% strongly agreed and the number that disagreed was 5.3%. The percentage that was not sure was 5.3% and was 1.8% for those who strongly disagreed. This shows that most of the respondents were aware of the importance of ensuring that all people should access HCT services. Only a few of the respondents were not aware of this information.

The majority, 60% of the respondents indicated that men were reluctant to take part in testing for HIV. The study findings showed that females students' knowledge of use of VCT, was higher than that of male students in a significant way. The same observations

were true in attitude towards VCT, where females' attitudes were higher than that of males, and in the area of use of the VCT, women used it in a manner that was more significant than the males.

5.2.3 Assessment of men's practices about HIV uptake

The respondents indicated that most of the men are afraid of stigma to approach testing centres. The percentage of the males was 86%, while only 14% indicated that they did not fear stigma. Men were reported as showing an attitude of lack of confidence in the HIV test (Kurth, Larry, Choko, Inwani, & Fortenberry, 2015). Additionally, a study that was conducted in Uganda showed that among the male participants only, 23% had been tested for HIV. Among the participants who were tested only 96% went back to secure their results.

According to Nyondo-Mipando et al.,2021. HIV testing in men remains fundamental to all HIV services especially in African societies where men are decision-makers for their households including health seeking behaviour's. Findings were Forty percent and 29.6% of men living with HIV in the urban and rural areas of Malawi were unaware of their HIV status compared to 25.7% and 23.6% of women in the same settings which concur with this study findings.

The findings of this study concur with Sharma, Barnabas, and Celum (2017) whose study showed that men in sub-Sahara Africa are reluctant to engage in services such as testing and counselling or efforts to prevent new infections by using circumcision. This creates challenges to efforts to provide counselling treatment and support to men. The

same study by Sharma, Barnabas and Celum (2017) added that the health care providers' progress in providing services to men had been hindered by factors such as confidentiality, remoteness of facilities, the time the services are offered and the stereotype that testing is for women.

Other obstacles that stood in the way of men accessing care and support are fear of stigma, lack of financial resources, poverty and cultural feelings and attitude that real men do not seek help. Men also worry about the challenges of confidentiality where health workers may divulge their status to other people.

Most of the respondents also indicated that they were afraid of the needles, while 88% were afraid of seeing blood. The majority, 70% of the male respondents who had engaged in sex, indicated that they had not used condoms.

The findings are corroborated by secondary data by NSF (2018) which also shows that men hardly take HIV test, do not use condoms frequently and have limited awareness of HIV and ART treatment.

Retention on ART is equally low for men. It is further noted that men are equally affected by negative sociocultural norms.

5.2.4 Determine the relationship between demographic data and VCT

According to Sanga et. al. (2015), females were about twice significantly more likely to test for HIV than males (OR=1.8; 95% CI=1.2-2.8; p = 0.006). Participants aged at least 18 years were significantly 3 times more likely to undergo HIV testing than those who

were aged less than 18 years (OR = 2.9; 95% CI = 1.8-4.7; p < 0.001). Likewise, participants who had sexual partners and had discussed with their partners on HIV testing were significantly 3.2 times more likely to undergo HIV test than those who had never discussed (OR = 3.2; 95% CI = 1.3-8.1; p = 0.013). However, participants who had indulged in sexual intercourse did not significantly differ in VCT uptake from those who had never practised sexual intercourse (OR = 1.4; 95% CI = 0.9-2.4; p = 0.168). Participants who were taking their studies in private schools were about twice significantly more likely to undergo HIV testing than those who were in public schools (OR = 1.8;95% CI = 1.1-2.7; p = 0.011). On the other hand, the type of school (boarding or day) did not significantly influence the uptake of VCT among the students p > 0.05.

5.2.5 Summary

Participants in this study were mainly men with a mean age of 30 years. From the study responses majority (61.5%) of the respondents were single. While 95.58% of the participants were knowledgeable about HIV/VCT,60% had negative attitude towards VCT, and about 65% of participants never tested for HIV. Fear of positive results, stigma and discrimination, and confidentiality of test results from health workers, following the positive results were reported as main barrier for VCT uptake among men.

CHAPTER 6

CONCLUSIONS, RECOMMEDATIONS AND LIMITATIONS OF THE STUDY

6.1 Introductions

This chapter discussed the implications of the study findings in the light of other studies, including the study's strengths and the public health relevance to the study population of male adults in Opuwo District. Several feasible recommendations are also made in this chapter.

6.2 Conclusions

The following conclusions were drawn from this study:

i) 4.5% of the males were not ignorant of the existence of the services offered by the Ministry of Health and Social Services.

ii) About 85, 84% of the respondents were aware that counselling services were offered on a voluntary basis.

iii) 5.50% of the respondents did not see the importance of knowing one's status especially in the context of being vulnerable to infection.

iv) According to the study's results, 96.64% of the respondents were aware that HIV might be spread by other methods, besides heterosexual activity, while 3.36% were not aware.

v) The respondents (94.5%) were aware of the value of being acquainted with knowing one's status and the importance of making life choices.

vi) Many of the respondents (81.48%) were aware that contracting STI increased the risk of HIV infection, while only 18.52% were unaware.

vii) About 95.58% respondents had knowledge about the effectiveness of the use of condoms, while 4.42% lacked that knowledge.

viii) The study revealed that 60% of men dislike taking HIV test. This finding is consistent with that of Sanga et al., (2015) done in Tanzania on VCT uptake among Secondary school students, in which the low uptake of VCT by males was found (29.3%). The study concluded that, this could be due to that male are not fully involving themselves in HIV prevention programs, making it hard for them to recognise the importance of knowing their HIV status as compared to females. Another finding like this study done in Ethiopia whereby VCT uptake was found to be higher among females as compared to male.

ix) 70% of the male respondents had sex without a condom.

6.3 Recommendations

The results of this research established the following: 4.5% of the participants were not aware of the existence of the VCT services offered by the MoHSS, while 85.84% were aware that counselling services were offered on a voluntary basis. Only a few were not aware of this service. About 5% of the respondents did not see the value of knowing

one's HIV status. Whereas 96.64% of the respondents were aware that HIV could be transmitted by other methods besides sexual intercourse, 3.36% were unaware. Most of the participants, 94.5%, knew the value of knowing one's status and the importance of making life choices. The study indicated that, 81. 48% respondents were aware that contracting STI increased the risk of HIV infection, while only 18. 52 % were not aware of that. It also shows that, 95. 58% of the respondents knew that using condoms was effective, while 4. 42% of the men lacked this knowledge.

The following recommendations to be implemented by the MoHSS were made based on the conclusions:

i) Government health practitioners and non-governmental organizations should be incorporated into an awareness campaign programme and educational plans relating to HIV testing in all schools including mobile schools' education system.

ii) The MOHSS and other non-governmental organisations should target education and awareness initiatives among men in Opuwo District to emphasise HIV transmission, and the importance of knowing ones HIV status.

iii) A programme should be launched that targets behaviour change among Namibian men to enable them to utilise VCT services at their disposal.

iv) Dissemination of information regarding the importance of HIV testing, should be made through all forms of communication e.g., Radio services, newspaper, and social media and traditional leaders etc.

v) NGOs and CBOs should continue to raise awareness on the effectiveness of condom use in preventing STIs and HIV infection.

vi) Outreach programmes that target the testing of men should be encouraged by MOHSS and CBOs.

The study revealed that most men are aware of the services that are offered at the health centres and hospitals. Most of the males are aware that the services are voluntary, and they are willing to use them. However, the study also identified several factors that may impinge on the men's participation in voluntary counselling such as fear of the needle, fear of blood and fear of confidentiality being violated regarding their status by health workers. The male participants were also concerned with the stigma that is associated with accessing testing centres. The study did not establish a relationship between education and the men's participation in voluntary counselling services.

6.4 Suggestions for future research

The research used a descriptive research design to collect data to answer the research questions. It is suggested that future research may focus more on a qualitative research paradigm that seeks to explore the perception and attitudes, of males towards use of VCT services using an in-depth interview, targeting the entire Kunene Region, or other Regions at large.

6.5 The contribution of the study to future research

The studies were that, even in rural areas men still struggle to access VCT services as noticed in other countries. The study also observed that in cases where the services are placed closer to men as in the case of being allowed to be done at home, more men would seek testing. It was also observed that men in rural areas have the same challenges as men in urban areas in confidentiality and fear of stigma. The study therefore calls on more outreach programmes on men to show them the services that are available and to make them easily accessible to them. Men also need to be assured of confidentiality, which can easily be done by sending the right messages to them, reassuring them that if their status comes out positive, it is safe.

6.6 Limitations of the study

Although this study is the first of its kind to be conducted among male adults in Opuwo District and has established valuable facts, it has its limitations. The study focused on male adults aged between 15-50 years and above in Opuwo District at the selected locations, which may limit the respondents' willingness to participate in the study. To eliminate this, the researcher offered a comprehensive explanation of the purpose of the study, ethical considerations, anonymity and explained that it was voluntary. Further, there was a possibility of selection bias as the focus was only on male adults aged 15-50 years and above in selected locations. This was a questionnaire-based study and the researcher relied completely on information provided by the respondents. This could

lead to bias and a misunderstanding of the questions. The male adults not residing in those locations were not taken into consideration.

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APPENDICES

Appendix A: University of Namibia Research Approval Letter

CENTRE FOR POSTGRADUATE STUDIES

University of Namibia, Private Bag 13301, Windhoek, Namibia
340 Mandume Ndemufayo Avenue, Pioneers Park
☎ +264 61 206 3275/4562; Fax +264 61 206 3290; URL: http://www.unam.edu.na

UNAM

RESEARCH PERMISSION LETTER

Student Name: Sewako TTjipundi,

Student number: 9806199

Programme: Master in Nursing Science

Approved research title: Assessment of the knowledge, attitude and practices of male adults regarding the uptake of HIV Counselling and testing, at Opuwo District, Kunene region,

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

23 oct 18

Prof Marius Hedimbi
Director: Centre for Postgraduate Studies
Tel: +264 61 2063275
E-mail: directorpgs@unam.na

Date

Centre for Postgraduate Studies
Office of the Director
2018 -10- 23
University of Namibia
UNAM

Appendix B: MoHSS Opuwo Health District Approval Letter

REPUBLIC OF NAMIBIA

Ministry of Health and Social Services
OPUWO HEALTH DISTRICT

Private Bag 3003 Tel. no.: 065 – 272843
Opuwo Fax no.: 065 – 273843

OFFICE OF THE SENIOR MEDICAL OFFICER

10TH September 2019

Dear Sewako

SUBJECT: APPROVAL LETTER TO CONDUCT A STUDY AT OPUWO HEALTH DISTRICT:

The above-mentioned subject bear's reference.

Kindly proceed with the research at Opuwo district hospital. The Ministry of Health and Social Services permission already granted on the 28 March 2019 is enough, and the procedure you followed is the correct one. Please go ahead with out any hesitation.

Best Regards

Mr. Tomas Shapumba

Director

Kunene Regional Health Directorate
Ministry of Health and Social Services
Private Bag 3003, Opuwo
Tel: +264-65-272 801
Cell: +264-81- 127 0567
Fax: +264-65-273 022

Alternative Email: tshapumba@mhss.gov.na

www.healthnet.org.na

Appendix C: University of Namibia Ethical clearance

UNAM
UNIVERSITY OF NAMIBIA

ETHICAL CLEARANCE CERTIFICATE

Ethical Clearance Reference Number: SON /481/2019 **Date: 8 August, 2019**

This Ethical Clearance Certificate is issued by the University of Namibia Research Ethics Committee (UREC) 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 Faculty/Centre/Campus Research & Publications Committee sitting with the Postgraduate Studies Committee.

Title of Project: Assessment Of The Knowledge, Attitude And Practices Of Male Adults Regarding The Uptake Of Hiv Counseling And Testing In Opuwo District Kunene Region, Namibia.

Student: SEWAKO THEKLA TJIPUNDI

Student Number: 9806199

Supervisors: *Dr. T. Amakali-Nauiseb (Main) Ms. L. Nghifikwa (Co)*

Take note of the following:

(a) Any significant changes in the conditions or undertakings outlined in the approved Proposal must be communicated to the UREC. An application to make amendments may be necessary.
(b) Any breaches of ethical undertakings or practices that have an impact on ethical conduct of the research must be reported to the UREC.
(c) The Principal Researcher must report issues of ethical compliance to the UREC (through the Chairperson of the Faculty/Centre/Campus Research & Publications Committee) at the end of the Project or as may be requested by UREC.
(d) The UREC 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.

UREC wishes you the best in your research.

Dr. J.E. de Villiers: UREC Chairperson

Ms. P. Claassen: UREC Secretary

Appendix D: Language Editors Letter

NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY

DEPARTMENT OF COMMUNICATION
Private Bag 13388, 13 Jackson Kaujeua Street Windhoek, NAMIBIA
Tel: (264-61) 207-2409/2443 *Fax: (264-61) 207-2310*

03 November 2021

TO WHOM IT MAY CONCERN

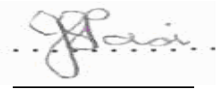
LANGUAGE EDITING – MS SEWAKO THEKLA TJIPUNDI (9806199)

This is to confirm that a **Master of Nursing Science Thesis** titled "A**ssessment of knowledge, attitude and practices of male adults regarding the uptake of HIV counseling and testing in Opuwo District, Kunene Region, Namibia"** by Ms Sewako Thekla Tjipundi, student No. 9806199, was submitted to me for language editing.

The thesis was professionally edited, and suggestions were made in the document, which if followed by **Ms Sewako Tjipundi**, will result in a thesis with a high standard of English. Given the nature of the process, I restricted my editing to language issues, which I feel have now been satisfactorily resolved, but I remain available for consultation as long as necessary.

Please feel free to contact me should you need more information. My contact details are: Tel: +264 61-2072285; Cell: +264 813926498. Email: jpasi@nust.na.

Yours faithfully



Dr Juliet S. Pasi
Senior Lecturer – Communication Department
B. A. English & Linguistics
B. A. Special Honours in English
Graduate Certificate in Education
M.A. in English
DLitt et Phil

Appendix E: MoHSS Approval Letter to conduct research

REPUBLIC OF NAMIBIA

Ministry of Health and Social Services

Private Bag 13198	Ministerial Building	Tel: 061 – 203 2562
Windhoek	Harvey Street	Fax: 061- 222558
Namibia	Windhoek	E-mail: hnangombe@gmail.com

OFFICE OF THE EXECUTIVE DIRECTOR

Ref: 17/3/3 STT

Enquiries: Dr. H. Nangombe

Date: 28 March 2019

Ms. Sewako T. Tjipundi
PO Box330
Opuwo
Namibia

Dear Ms. Tjipundi

Be: Assessment ofthe knowledge.attitude and practices ofmale adults regarding the uptake of H/VcounseWng and testing.Opuwo District Kunene region. Namibja.

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,

MR. BEN NANGOMBE
EXECUTIVE DIRECTOR

"Health for All"

Appendix F: Questionnaire

Student name: Sewako Thekla Tjipundi

Student number: 9806166

Topic: Assessment of the knowledge, attitude and practices of male adults regarding the uptake of HIV counseling and testing at Opuwo District, Kunene Region, Namibia.

Purpose of Questionnaire: The purpose of this research is to assess the Knowledge, Attitude and Practices of male adults regarding the uptake of HIV Testing Services (HTS) in Opuwo District, Kunene Region, and Namibia. Kindly sign the attached consent form if you agree to participate in the study.

Section A: Demographics Information of Respondents.

Please select one by ticking where it applies to you.

1. Which age group do you belong?

Age (years)	**Tick (√)**
15 – 24	
25-34	
35-44	
45-54	
55 and above	

2. What is the highest level of education you have completed?

Item	**Tick (√)**
1.None	

2.Primary	
3.Secondary	
4.Tertiary	

3. What is your marital status?

Item	**Tick (√)**
1. Single	
2.Married	
3.Divorced	
4. Cohabiting	
5. Widower	

4. What is your occupation?

Item	**Tick(√)**
1. Student	
2. Unemployed	
3.Employed in public service	
4.Self-employed(small business/subsistence farming)	
5. Employed in corporate/big business	

5. Which ethnic group do you belong to?

Item	**Tick√**

Herero	
Himba	
Ovambo	
Damara	
Zemba	
Other (specify)	

6. What is your main source of information on health issues?

Item	**Tick√**
Radio	
Television	
Newspapers	
Healthcare workers/health facilities	
Friends/family members	
Church leaders	
7.Other (specify)	

7. Religion

Item	**Tick√**
Catholic	
Lutheran	
Pentecostal (new generation churches)	
4. Traditional believer	
5.Other (specify)	

SECTION B: Knowledge of male adults about HIV Counselling and Testing

Kindly mark what you think is correct:

	Yes(√)	**NO(√)**	**Don't know**	Other
1. Ever heard about Voluntary Counselling and Testing (VCT)?				
2. Do you know that HIV Testing Services involves individuals who are being tested on their own will?				
3. HIV can be transmitted in other ways than sexual intercourse?				
4. Do you consider the use of a condom a very effective method of preventing STD/AIDS or pregnancy?				
5. Do you know that the test result is not disclosed to other people without your consent?				
6. Do you know where HIV Testing Services are offered?				
Is VCT important for the prevention and control of HIV?				
8. Knowing the HIV status through VCT empowers the individual to make right choices in life and relationships?				
9. Being diagnosed with sexually transmitted infection poses a risk for HIV infection?				
10. People should undergo HIV testing at least once in 6 months				

Section C: Attitude towards HIV Testing Services (HTS) among male adults

To what extent do you agree with the following statements? **Mark only one box per line across**

Issue	**Strongly agree**	**Agree**	**Disagree**	**Strongly disagree**	**Not Sure**
1. Most males are not comfortable with HIV					

Counselling and Testing.					
2. Most males understand the benefits of going for VCT.					
3. Reading health education materials is important source of information on Voluntary Counselling and Testing VCT.					
4. Going for VCT is very important?					
5. VCT is only for those who are ill.					
6. VCT should be available for all individual who needs to know their status.					
7. Couples should undergo HTS before marriage.					
8. HTS is only for pregnant women and those who have HIV like symptoms.					

Section D: Practices of male adults to HIV Testing Services (HTS)

Mark (X) the reasons below which you think make males reluctant to participate in HTS?

	Yes	**No**	**Reason √**
Have you ever had VCT in the past?			
What were your reason of not having VCT?			
Fear of stigma and discrimination?			
Fear of approaching testing centres?			
Lack of trust of health workers to keep the results a secret (confidentiality)			
Partner refusal?			
Fear of positive result?			
Multiple sex partners			
Reliance on traditional practices			
Unwillingness/ ignorance to get tested			
Confidence of not having HIV			

Section E: Recommendations

Which of the following would you recommend to males to improve HIV testing and Counselling?

Item	**Tick (√)**
Home Based testing	
General education (To reduce discrimination)	
Specialised education (To promote early treatment)	
To promote workplace and community awareness	
Anti-Retroviral Treatment centre should be integrated with other chronic diseases	
Other (specify)	

Thank you for your time and effort to complete the questionnaire