

**PSYCHO-SOCIAL FACTORS IN VOLUNTARY COUNSELLING
AND TESTING (VCT) – A SOCIAL WORK INVESTIGATION IN
WINDHOEK, NAMIBIA.**

**A Thesis Submitted in Partial Fulfillment
of the Requirements for the Degree of
Master of Arts (Social Work)**

of

the University of Namibia

by

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2009

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ABSTRACT

The main purpose of the study was to collect baseline data on psycho-social factors affecting utilization of VCT services amongst the 15 to 49 year old people in Windhoek.

A cross sectional exploratory study design was utilized and the study generated baseline data using quantitative methods. Data were collected from 200 respondents using a standard structured questionnaire that was administered face to face by the researcher and two assistants. The sample design for the household survey was a stratified two-stage probability sample.

The findings suggest that there was more preference to receive HIV results on the same day. The preference by participants to receive results on the same day may suggest that rapid HIV testing is preferable and might be one way that can be used to improve collection of results.

For social support, the findings seem to suggest that parents as well as church pastors are very supportive of individuals going for HIV testing. However, tested individuals were equally likely as those not tested to agree that the church pastors and parents would provide them with support if they tested HIV positive.

Outcome expectations and factors related thereof were identified to be important in distinguishing those who had been tested for HIV from those who had not taken HIV testing. More importantly, those who tested for HIV before were more likely to report that knowing one's HIV status brings peace of mind, helps access ARVs and is important for positive living as compared to their never tested counterparts. Thus, demand creation strategies for HIV testing may need to emphasize on these key benefits of getting tested.

On perceptions about availability of ART, the findings show that individuals who never tested for HIV are less likely to believe that ART is readily available if they needed it compared to those tested. Additionally, respondents who never tested for HIV did not seem to agree that public health facilities near where they stayed offered free ART, compared to those that tested for HIV before. Such perceptions are critical in determining demand for HIV testing.

The findings seem to suggest that factors related to quality of VCT services are pertinent in determining demand for HIV testing. A significant difference between the perceptions of tested and non tested participants was observed.

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Acknowledgements

I would like to express my sincere gratitude to my supervisor Dr M Grobler for her invaluable guidance, support and encouragement. She was very patient and understood the challenges that I experienced throughout my studies. I wish to thank all my friends and colleagues who gave me the necessary support during my studies. A special recognition goes to Jan Swartz for his technical support during fieldwork and final analysis of the results.

This is a special dedication to my grandmother who passed away on 25th November 2008, may her soul rest in eternal peace. My wife and children deserve a special appreciation for being there for me when I needed them most. There were times when I could not be with them but they understood and gave me their prayers and support.

I give thanks to God for giving me life, hope, good health wisdom and the opportunity to accomplish my task. Since the list of people who deserve to be thanked and acknowledged is very long to exhaust, let me express a sincere thanks to everyone who, in one way or another, made the accomplishment of this task possible.

DECLARATION

I, Edington Dzinotyiweyi, declare hereby that this study is a true reflection of my own research, and that this work, or part thereof has not been submitted for a degree in any other institution of higher education.

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Edington Dzinotyiweyi

Signed _____

Date _____

List of Abbreviations

AIDS:	Acquired Immune Deficiency Syndrome
ANC:	Antenatal Care
ART:	Antiretroviral Therapy
ARV:	Antiretroviral
DHS:	Demographic Health Survey
DSP:	Directorate of Special Programmes
FHI:	Family Health International
HBM:	Health Belief Model
HIV:	Human Immuno Deficiency Syndrome
KAP:	Knowledge, Attitudes and Practices
MoHSS:	Ministry of Health and Social Services
NGO:	Non Governmental Organization
PLWHA:	People Living with HIV and AIDS
PMTCT:	Prevention of Mother to Child Transmission
PSI:	Population Services International
PSU:	Primary Sampling Unit

SPSS:	Software package for Social Sciences
STI:	Sexually transmitted Infection
TB:	Tuberculosis
TBPT:	Tuberculosis Preventive Therapy
UNAIDS:	Joint United Nations Programme on HIV/AIDS
UNICEF:	United Nations Emergency Fund for Children
USA:	United States of America
USAID:	United States Agency for International Development
VCT:	Voluntary Counselling and Testing
WHO:	World Health Organization

CHAPTER 1

INTRODUCTION AND ORIENTATION TO THE STUDY

1.1 Introduction

Voluntary counseling and testing (VCT) is the process by which an individual is given the opportunity to undergo counselling which enables him or her to make an informed choice about getting tested for HIV. This decision must be entirely the choice of the individual without any form of coercion. The process provides people with an opportunity to learn and accept their HIV status in a confidential environment with counseling and referral for ongoing emotional support and medical care. Pertinent to note is that people who test HIV positive can benefit from appropriate medical care and interventions to treat HIV related illnesses. HIV positive pregnant women can take appropriate measures to prevent transmission to their infants. Generally knowledge of HIV status can help people to make informed decisions to protect themselves and their sexual partners from HIV infection.

The potential benefits of VCT for the individual include but are not limited to improvement of health status through good nutritional advice and earlier access to care and treatment/prevention for HIV-related illness. Through counseling, individuals get emotional support, better ability to cope with HIV-related anxiety and awareness of options for prevention of mother to child transmission (PMTCT).

In a randomised trial conducted in Kenya, Tanzania and Trinidad by Family Health International (FHI), World Health Organization (WHO) and the Joint United Nations

Programme on HIV/AIDS (UNAIDS) VCT has provided evidence to support the theory that it is both effective and cost effective as an important entry for care and support as well as a strategy for facilitating behaviour change (Kipitu, 2005). In the same study, there was more than 40% reduction in unprotected sexual intercourse among individuals who received VCT, compared to those who received only health education. In a similar study conducted by the Voluntary Counselling and Testing Efficacy study Group in the same countries, more than 3000 individuals and 586 couples were randomly assigned to receive VCT or health education talks. Those who were assigned to VCT received counselling and HIV testing. Participants who were assigned to health education watched a 15 minute video and participated in a discussion about HIV transmission and condom use. The study showed a marked decrease in rates of unprotected sex for both men and women who took part. For men who participated in the study, there was a 35% decrease in unprotected sex amongst the VCT group. The decrease in unprotected sex for men who participated in the health education group was 13%. Results for women showed a similar trend, with a 39% decrease amongst the VCT group and 17% decrease amongst those who were exposed to health education (Coates, 2000). A study by Sherr et al., (2007) in Zimbabwe showed that VCT is more effective as an entry to care and support than as a prevention strategy because some individuals who tested HIV negative were more likely to adopt risky sexual behaviours. Beside the conflicting evidence about the effectiveness of VCT as a prevention strategy, it remains a major lynchpin in HIV/ AIDS prevention, care and treatment strategies, hence the need to promote universal access.

Over the past 20 years VCT has helped millions of people learn their HIV status, yet more than 80% of people living with HIV in low and middle income countries are not aware that they are infected with HIV (WHO, 2002).

Despite decades of education and campaigns, the WHO further estimates that less than 10% of HIV infected people in the African countries, who are at the epicenter of the pandemic, realize they have HIV (Zavis, 2006). Studies in other African countries that have implemented VCT services much earlier than Namibia, indicate that there are a number of factors that could affect the uptake of VCT services. This study, therefore aims to document baseline psycho-social factors that could be contributing to low utilization of VCT. More importantly, the study will contribute to Social Work knowledge for the alleviation of practice related problems and provide useful research to help guide the implementation of VCT services in Namibia in the future.

1.2 Background Information

Never in our history has there arisen such a widespread and fundamental threat to human development as HIV/AIDS. Because of HIV/AIDS millions of children are being orphaned, life expectancy of people continues to drop, food security has been threatened, and productivity in industries is affected because highly skilled and educated human resources are sickly whilst others are dying of HIV/AIDS related illnesses. HIV/AIDS has had a major effect on families, especially in areas of high prevalence and where most patients are young and economically active. There are cases where both partners in a relationship may be infected and even the children. Financial problems increase as the breadwinners become ill and children are often unable to continue, or even start,

schooling. HIV/AIDS has resulted in older people looking after their younger, previously productive children, without the financial contribution from those children. This has resulted in harsh economic and social consequences. In most African countries, when people become unwell with HIV disease, and are unable to continue working to support their families, they often return to their parents to be cared for during the last stages of their illness. Old people are being left to care for their grandchildren. In other homes, children have become the main care providers for their parents or their sick siblings. Some of the care providers are becoming exhausted in case where they have been looking after a sick person for a long time, or if they have had many other friends or family members die. Because of tiredness it is becoming difficult to give the sick relatives or friends the care they need. Again, some of the health workers working with HIV/AIDS patients are becoming withdrawn and fatigued by multiple losses and the complex care needs of HIV/AIDS patients. In African countries, these stresses are exacerbated by the lack of resources.

According to UNAIDS estimates, approximately 32 million people in the world were living with HIV/AIDS at the end of 2006. Sub-Saharan Africa is the region with the highest burden, constituting almost 70% of people living with HIV/AIDS worldwide. In 2007, southern Africa accounted for almost a third (32%) of all new HIV infections and AIDS related deaths globally, with a national adult HIV prevalence exceeding 15% in eight countries. These countries are Botswana, Lesotho, Mozambique, Namibia, South Africa, Swaziland, Zambia and Zimbabwe (UNAIDS, 2008).

Recent studies indicate that the overall coverage of testing and counseling is extremely low in countries with the highest HIV/AIDS burden. National surveys in Kenya, Tanzania, and Zimbabwe have shown that while around 60% of adults want to know their HIV status, only 15% or less have had access to VCT (USAID, 2003). In South Africa, the uptake of VCT is reportedly low. Only an estimated 18% of the population has been tested for HIV and know their HIV status (Pettifor et al., 2004). In a study carried out in Zimbabwe, out of 37% participants who expressed willingness to get tested, only 9% actually went for HIV testing (Fylkesnes, Haworth, Rosenvard and Kwapa, 1999). A related study conducted among University students in Zambia and in the United Kingdom (UK) revealed that 35.0% and 15.0% of the students reported willingness to get tested for HIV respectively. However, only 10.0% of the Zambian and 7.0% of the UK students had actually gone for HIV testing (Baggaley, 1997). This shows that there are factors that affect the utilization of VCT services.

1.2.1 HIV/AIDS in Namibia

Table 1: Facts about Namibia

Facts about Namibia		
Estimated Population	2 031 000	
Population Growth Rate	1.4%	
Life Expectancy in years at birth (f/m)	55 / 52	
Number of people living with HIV	230 000	
Adult HIV prevalence rate	17.8%	
Estimated orphans due to AIDS	85 000	
Bordering Countries and water body: Zambia, Angola, South Africa, Botswana, Atlantic Ocean		
Source: UNAIDS, 2006		

Despite a relatively small population of around 2 million people and a large geographical area of over 800 000km², Namibia is one of the countries in the world most affected by the HIV/AIDS pandemic (Directorate of Special Programmes [DSP], 2005). The Ministry of Health and Social Services (MOHSS) in Namibia, estimates that there are about 204 000 people living with HIV/AIDS (PLWHA) and in some parts of the country between 50 – 70% of hospital admissions are HIV/AIDS related, making HIV/AIDS the leading cause of deaths and hospitalizations (DSP, 2005). The 2008 crude HIV prevalence among pregnant women was estimated at 17.8% (MoHSS, 2008). Just like any other country in Southern Africa, the impact of HIV/AIDS extends upon all levels of Namibian society, from increasing morbidity and mortality rates, increasing numbers of orphans, economic erosion due to decreased size and efficiency of the labour force and an increasingly overwhelmed health sector.

1.2.2 National Response to the HIV/AIDS epidemic

The Government of Namibia has made diverse and significant efforts to mitigate the increasing and devastating impact of HIV/AIDS in Namibia. The National AIDS Committee (NAC) was created to advise government in its efforts to prevent the spread of HIV. The NAC was followed by the establishment of the National AIDS Control Programme (NACP) within the Ministry of Health and Social Services (MoHSS) in 1990. Following a series of plans designed to guide the national response (Short-Term Plan, Medium Term Plan 1 (MTP-1) for 1992-1998), an evaluation of MTP-1 was conducted in 1996. This evaluation led to the establishment of the National AIDS Coordination

Programme (NACOP), a multi-sectoral committee that replaced NACP and developed the country's Medium Term Plan II (MTP-II) from 1999-2004 (DSP, 2004).

Through the MTP-II, the NACOP established the National Multi-Sectoral AIDS Coordinating Committee (NAMACOC), which brought together high-ranking government officials, representatives from the private sector, NGOs and other stakeholders to commit themselves to policy and programming initiatives aimed at addressing HIV/AIDS in Namibia. The NAMACOC was replicated at regional level through the establishment of Regional AIDS Coordinating Committees, and are co-chaired by the Regional Governors and Regional Health Directors. The National AIDS Executive Committee (NAEC) was subsequently tasked with the responsibility to implement decisions made by NAMACOC. In 2003, the MTP-II was assessed, with key recommendations forming the basis for the current national HIV/AIDS strategy (MTP-III 2004-2009), which was launched in April, 2004.

In addition to the foregoing activities, Namibia has also been proactive in the creation of numerous policies and guidelines which address various aspects of the epidemic such as Sexually Transmitted Infections (STIs) and HIV, Orphans and Vulnerable Children, Prevention of Mother to Child Transmission (PMTCT) among others. Internal policies and guidelines are further supported through Namibia acting as a signatory to numerous international agreements, treaties, conventions, declarations and commitments in the context of HIV/AIDS including the Millennium Declaration (UN, 2000) and the UNGASS declaration of commitment on HIV/AIDS (UN, 2001), among others.

1.3 Aim and Objectives

The aim of this study was to collect baseline data on psycho-social factors influencing the utilization of VCT services in Namibia. The objectives were:

- To investigate if receipt of social support affects utilization of VCT services.
- To explore if outcome expectation affects utilization of VCT services.
- To investigate if new rapid HIV testing technology's ability to supply immediate results affects uptake of VCT.
- To find out if availability of antiretroviral (ARV) therapy affects the uptake of VCT services.
- To explore the effect of costs on the utilization of VCT services.
- To investigate the effect of quality of services on the uptake of VCT.

1.4 Statement of the Problem

The problem experienced is low uptake of VCT services by sexually active people. VCT provides people with an opportunity to get tested, learn and accept their HIV status. Through effective counseling, it can enable people to evaluate their behaviours and the consequences thereof. A negative HIV test result offers a key opportunity to reinforce the importance of safety and risk reduction behaviours. In addition people who test HIV positive would benefit from early and appropriate medical care. Pregnant women, who learn about their HIV positive status early, are likely to prevent HIV transmission to their babies. This is made possible through the use of prevention of mother to child transmission (PMTCT) activities.

Despite all the document benefits of HIV testing, the majority of people in Namibia remain uninformed about their HIV status. More specifically, the utilization of VCT by Namibians aged between 15 and 49 years is low, though there are more than 300 facilities with VCT services throughout the country. Much information on factors that hinder the uptake of VCT services is based on studies done in other countries. As such, behavioural change programmes including VCT, have been developed based on such information and yet there is little improvement in the number of Namibians accessing VCT. There is paucity of literature about factors contributing to low utilization of VCT in Namibia. It is against this background that the researcher proposed a study that sought to document baseline data on **psycho-social factors contributing to low utilization of VCT services.**

1.5 Variables influencing the problem (sub-problems)

The following variables are influencing the research problem:

The dependent variable is **“Utilization of VCT services”**

In the study utilization of VCT services is referred to as use of VCT services by men and women aged 15-49 years at any given time.

1.5.1 Social support: Do people’s expectations to receive either material or psycho-social support from friends, family and the church affect utilization of VCT services?

There is conflicting evidence in studies done in other countries, a study in Tanzania found that about half of respondents reported receiving support from their partners, and evidence from Kenya and Zambia show that the majority of HIV-positive women reported positive outcomes with disclosure (Maman, et al., 2003). However the proportion of women who reported positive reactions from their partners was

significantly greater among women who had tested HIV negative, compared to HIV positive women. HIV positive women were significantly more likely to report that their partners reacted badly compared to HIV negative ones. In another study in Tanzania, partners' attitudes towards testing were however negative. According to Maman, et al., (2001) the social meaning of HIV testing and what partners ascribed to these meanings proved to be important barriers in the decisions to undergo HIV testing and whether to involve partners in the testing experience.

1.5.2 Outcome expectations: This variable aimed to measure how respondents perceived the outcome of getting an HIV test. This entailed looking at participants' perceptions of how their significant others and community at large would react if they were to test HIV positive. In a study done in Uganda, 44% of Kampala youth and 28% of Masaka youth who wanted to get tested for HIV in the future, reported that they had not done so because they feared a positive result. In a similar study in Kenya, only 14% of Kenyan youth reported that fear of a positive result was the deterring reason they had not sought HIV testing (Horizons, 2001). Such beliefs may cause some people to think in a negative way of the consequences of reporting for VCT. A study by Van Dyk and Van Dyk, (2003) highlights that people had feelings of fatalism and depression because they believed that there was nothing they could do about HIV/AIDS

1.5.3 Immediate test results - Rapid HIV test technology: This variable was aimed at assessing if availability of HIV results on the same day would increase or depress demand for VCT. Evidence in other African countries suggests that the introduction of simple-rapid HIV testing is likely to increase the uptake of VCT services. In Zambia when rapid HIV testing was introduced in a pilot project at antenatal clinics, the overall

acceptance was as high as 81% (Bhat, Bakari, Mckenna, Myrick, and Mwinga, 1998). In Malawi uptake of VCT had been low but increased four fold when the simple rapid HIV testing technology was available (Msowoya, Marum, and Barnaba, 2000).

1.5.4 Availability of treatment: This was aimed at measuring the effect of availability and accessibility of antiretroviral (ARV) drugs on the utilization of VCT services. A positive association between ARV provision and increased VCT utilization has been established in some countries. The Khayelitsha antiretroviral therapy programme in South Africa offers strong evidence to support that ARV provision provides a strong incentive for people to be tested. Since the inception of ARV treatment, the utilization of VCT services in Khayelitsha rose from fewer than 1000 HIV tests in 1998 to more than 12000 in 2002. It is argued that such increases in the utilization of VCT services have not been witnessed in areas where ARVs are not provided (WHO, 2004). It can thus be argued that in high prevalence contexts within Africa, increased VCT utilization attendant upon ARV provision could make a significant impact on prevention, by substantially increasing the percentage of people who know their HIV status.

1.5.5 Affordability of VCT services: This variable was aimed at assessing the impact of cost of VCT services, including transport, on the utilization of VCT services. A study of young couples in rural regions of western Kenya, suggests that cost factors can significantly affect uptake and acceptability of VCT services by young people. If counseling and testing was offered free of charge, 95.0% of the participants reported that they would accept the service. When the counseling and testing was offered at a cost of around US\$4, 00 between 31.0%-40.0% of the participants reported that they would take the test (Damesyn, Stiehm, Neumann, Morisky and Omwomo, 1998). Additionally, about

30% of untested Ugandan youth and 13% of untested Kenyan youth cited cost as a reason they have not had a test. These findings were common in typically rural communities (Horizons, 2001).

1.5.6 Quality of services: This variable was aimed at assessing the perception of participants towards the quality of VCT services in general. It also aimed at assessing the attitude of health workers and VCT counselors towards clients as it relates to utilization of VCT services. Unmarried but sexually active adolescents in Bangladesh reported that they did not feel comfortable seeking family planning or STI services from nearby clinics and pharmacies and perceived providers to be judgmental and unfriendly (Bhuiya, Rob, Khan, and Alkibir, 2000). In a study of people who were not tested before, and who did not plan to get tested, Philips, Coates, Eversley and Catania (1995) discovered that participants, especially women in stable relationships were only willing to be tested if no one else could have access to their results.

1.6 Research questions

To facilitate the collection of data towards understating low utilization of VCT, the following research question needed to be answered.

Primary question:

What are the psycho-social factors affecting utilization of VCT services in Windhoek?

The secondary questions are reflected in the objectives and variables of the study as highlighted in the preceding discussion.

1.7 Research methodology

An exploratory descriptive cross sectional research design was utilized to gain insight into psycho-social factors affecting utilization of VCT. The study utilized a quantitative data acquisition instrument for data collection. The instrument was pilot tested before the final data collection field work. A two stage cluster design sampling method was used. The collected data was entered into the computer and analyzed using SPSS version 11.0

1.8 Ethical Considerations

Because HIV/AIDS is a sensitive subject, ethical issues were seriously taken into consideration. The protection of human subjects has become high priority among members of scientific and health communities (Polit and Hungler, 1999). To ensure that ethical issues were observed, the following steps were taken:

Informed consent:

- The participants were clearly informed about the purpose of the study and that their responses would remain totally anonymous. The researcher ensured that all participants who participated in the study were legally and psychologically sound to give oral consent. Oral consent was given by participants as they were not keen to sign the consent form. Participation was voluntary, free from coercion and all respondents were informed that they were at liberty to refuse to provide information or withdraw from the study at any time.

Violation of privacy/anonymity and confidentiality:

- All study participants were anonymously identified to ensure privacy and were assigned delinked codes. All the information collected from respondents was handled confidentially by the researcher and the research assistants who were involved in the study. Participants were assured that all the information obtained from them was going to be used only for study purposes only.

Stigma:

- Since stigma is frequently related to HIV/AIDS some people could have associated those taking part in the study with HIV positive people. For that reason all the interviews were carried out in a private and confidential environment. Interviewees were asked to choose a place they were comfortable with within their premises. In addition, respondents were informed that once the research report had been accepted, the researcher would destroy all documents containing raw data.

1.9 Definition of Concepts

The following terms are used repeatedly throughout this thesis. The definition of terms is meant to ensure that both the researcher and readers share the same meaning of concepts.

AIDS: The acronym AIDS stands for “Acquired Immune-Deficiency Syndrome”. AIDS is a collection of most common illnesses, which affect people infected with HIV.

Antiretroviral therapy (ART): HIV is a retrovirus, so drugs against HIV are called anti retroviral drugs, shortened to ARVs. Giving ARV drugs in the correct way with adherence support is called ARV therapy, shortened to ART.

Confidentiality: This means keeping clients information and not disclosing it to unconcerned people who have nothing to do with the client professionally or people that the client does not approve of.

HIV: HIV stands for “Human Immunodeficiency Virus”. It is a virus, which attacks the white blood cells (immunity cells) of the body. The virus reduces the body’s ability to defend itself against different forms of infection.

New Start Centre: Refers to VCT facilities using a franchise brand ‘New Start Centre’. The term ‘New Start’ implies that taking an HIV test is a new discovery for the client. The client is expected to lead a new lifestyle following their known HIV status.

Primary sampling unit: A primary sampling unit (PSU) is a geographical area, which was formed on the basis of the population in enumeration areas (EAs) as reported in the 2001 Population and Housing Census of Namibia.

Psycho-social factors: This refers to a combination of factors related to the mental characteristics or attitude of an individual and factors to do with society and its organization.

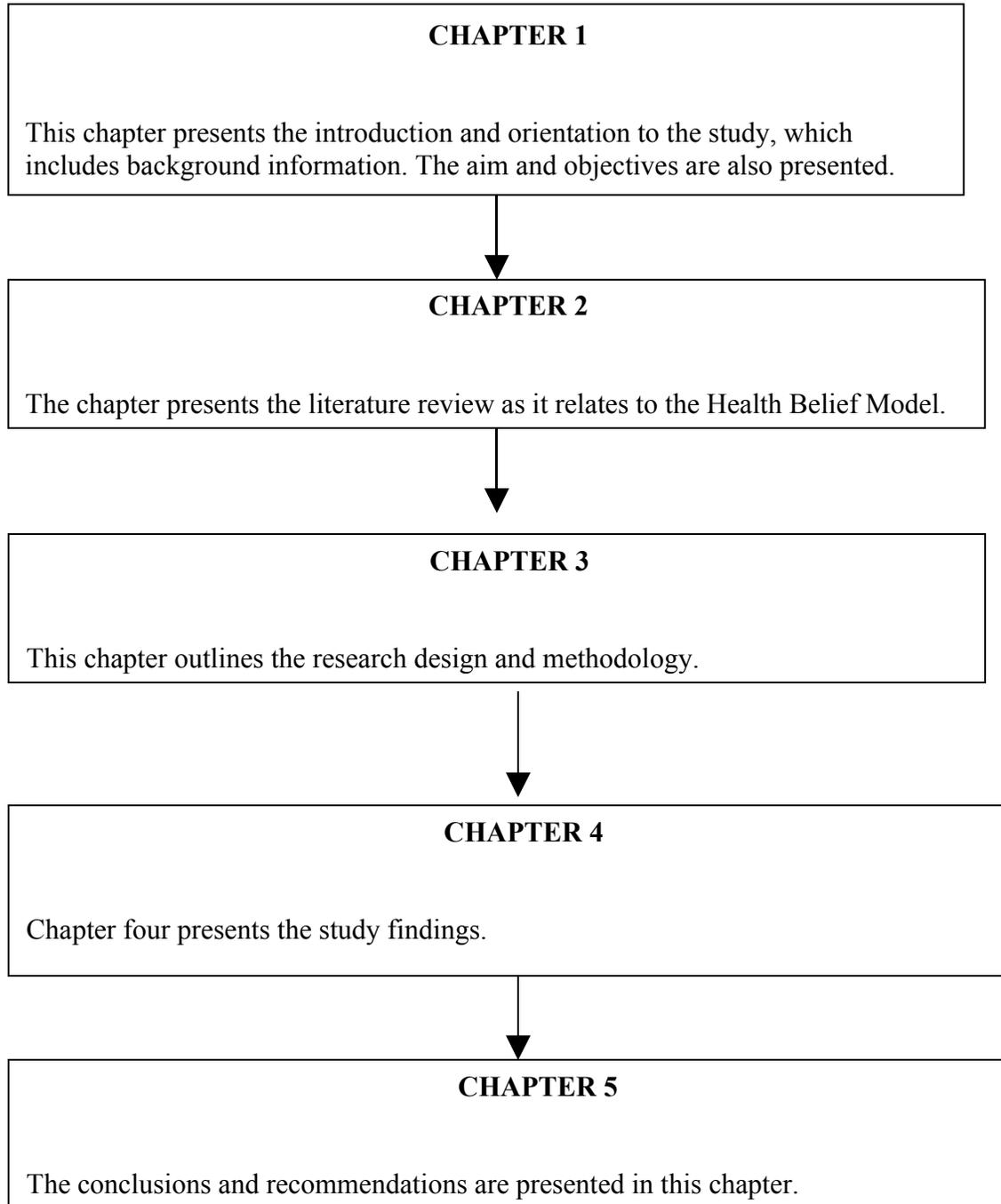
Rapid HIV testing: This refers to the modern HIV testing method which tests for the availability of HIV anti-bodies in the blood and ensures availability of HIV results within 30 minutes. Rapid HIV testing does not require a laboratory to run and is easy to perform.

Stigma and Discrimination: In the context of HIV/AIDS, stigma and discrimination refer to negative actions taken against individuals solely on the basis of their HIV status.

Voluntary counseling and testing (VCT): This is an HIV prevention intervention which gives the client an opportunity to confidentially explore his or her HIV risks and be assisted to learn his or her HIV status through testing.

1.10 Outline of the report.

The thesis is organized in the following chapters:



1.11 Summary

This chapter has highlighted that VCT is a very important intervention strategy for prevention as well as an entry to care and treatment interventions. Also highlighted in the discussion is that Namibia is one of the worst affected countries in Southern Africa with a prevalence HIV ratio of 17.8%. The government of Namibia has put diverse considerable efforts to redress the HIV/AIDS situation in Namibia. It has been noted that besides all the enumerated efforts made by the government and other stakeholders, the majority of Namibians remain uninformed about their HIV status. The aim of the study as highlighted in the preceding discussion was to collect data on psycho-social factors affecting utilization of VCT. An exploratory descriptive cross sectional research design was utilized to gain insight into psycho-social factors affecting utilization of VCT. The study utilized a quantitative data acquisition instrument and a two stage cluster design sampling method was used. The collected data was analyzed using SPSS version 11.0

The next chapter will discuss the literature reviewed about some of the factors affecting utilization of VCT. The chapter will also discuss the theoretical framework of the study in detail.

CHAPTER 2

PSYCHO-SOCIAL FACTORS THAT INFLUENCE VCT

2.1 Introduction

This chapter is divided into three sections and aims at reviewing existing published and unpublished research articles as well as research reports on the subject matter. More specifically, the review will provide a critical overview of the history of VCT and what is known thereof. In addition, it will critically examine what has been researched or discussed about factors affecting the uptake of VCT services. In so doing the researcher will avoid duplicating efforts by concentrating on discovering new knowledge. The literature review thus reveals that though other countries have done research on the subject matter, there is dearth of research material on factors affecting utilization of VCT in Namibia. This literature review will be discussed in the context of the Health Belief Model (HBM) which forms the conceptual framework for this study.

SECTION A

In this section the historical perspective of VCT is introduced. HIV counselling and testing services are highlighted as having been incepted in The USA before spreading to Africa. Two main approaches to counseling and testing namely, client initiated voluntary counselling and testing (VCT) and provider initiated counselling and testing (PICT) are discussed. Additionally the section discusses the three elements of VCT which are, HIV counselling, voluntary testing and confidentiality. The last part of the section highlights some of the identified benefits of VCT.

2.2 Voluntary Counselling and Testing

Historically, publicly funded HIV antibody counselling and testing services were incepted in the United States of America (USA) around 1985 to give an alternative to high risk persons who were learning their HIV status through donation of blood. At that time little was known about the prevalence and natural history of HIV infection. Counselling was considered as an essential adjunct to HIV testing. Then counselling was meant to address the accuracy and consequences of the test and was designed to assist people interpret the meaning of positive and negative results. Unlike today, HIV counselling was based on the recognition that learning HIV status may be very difficult for certain clients (U.S. DHHS, 1994).

From 1987 there was an increased understanding of the scope and severity of the HIV epidemic, resulting in the expansion of HIV counselling and testing services. Today, VCT for HIV is acknowledged within the international arena as an effective and essential strategy for both HIV prevention and care (FHI, 2003). Voluntary counselling and testing enables uninfected people to remain negative and enable those infected with HIV to plan for the future, avoid further re-infection and prevent HIV transmission to others. VCT has become a necessity in Sub Saharan Africa where HIV/AIDS has a high prevalence. It is estimated that more than 70% of HIV/AIDS cases in the whole world are in Sub Saharan Africa (Kipitu, 2005). As a result VCT services are becoming increasingly common in many countries in Africa. The first African VCT facility was established in Uganda over 15 years ago by the AIDS Information Centre in Kampala and reported testing over

380,000 people in 1999 (Jackson, 2002). Today VCT provision is expanding rapidly in different settings in many countries throughout Sub-Saharan Africa

Namibia is one of the countries in Sub-Saharan Africa which has recently established VCT services to help people learn their HIV status long before they become sick. The negative impact of the HIV/AIDS epidemic on all sectors of the Namibian economy is already being felt and is expected to increase considerably over the next decade. All levels and sections of the population are being negatively affected by the spread of this epidemic. In 1986 the first four cases of HIV/AIDS were reported in Namibia. By the end of 2003, a cumulative figure of 136,068 HIV/AIDS cases had been recorded by the Ministry of Health and Social Services (DSP, 2004). According to the sentinel sero-survey of pregnant women done in 2002, 931 of the 4227 pregnant women were infected with HIV giving a crude HIV prevalence ratio of 22.0%. The government of Namibia acknowledged that HIV/AIDS was a serious public health problem and has invested substantially into fighting against the disease. Salient to note is that the overall HIV prevalence in 2004 dropped to 19.7%, compared to 22.0% in 2002. This represented the first ever decrease in HIV prevalence since the start of ANC surveillance by the MOHSS in 1992 (DSP, 2005). The 2006 sentinel surveillance reported a prevalence of 19.9%. This non significant upward trend demonstrated that HIV infection was still widespread throughout Namibia and was increasing in some age groups (DSP, 2007). In 2008, the government of Namibia carried out its 9th National Sentinel Survey. The 2008 national HIV Sentinel Survey among pregnant women was 17.8% which represented a clear decrease. Although the 2008 survey results indicate a decrease in overall HIV prevalence,

there is need for more efforts to reduce the epidemic to below the epidemic threshold (MoHSS, 2008).

The MoHSS began offering very limited HIV testing in public health facilities around 1987. The testing was done at one central laboratory and the turnaround period for results was very long (DSP, 2006). By 2002 only one static NGO-VCT facility existed in Windhoek. The facility was run by a faith based organization and operated on part time basis. However HIV screening and testing in general could be done in some public health facilities. It is pertinent to note that in public health facilities, the service was provided with very limited pre and post test counselling due to shortage of trained HIV/AIDS counselors.

Through the support of donor agencies five new NGO/faith-based VCT facilities were established in 2003. Voluntary counselling and testing services continued to grow and to date the NGO supported ‘New Start Centre’ branded VCT facilities have expanded to 17. More importantly the Ministry of Health and Social Services (MoHSS) has expanded the availability of VCT services within established health facilities nationwide. To date there are more than 305 public health facilities providing VCT services and it is anticipated that this number will increase to 315 by end of 2009 (DSP, 2006).

2.3 HIV Counselling and Testing Approaches

In Namibia, access to knowledge of one’s HIV status has been mainly through client-initiated voluntary HIV counselling and testing (VCT) whose main aim is behaviour change. However, in our environment of high levels of stigma and discrimination, limited

access to services and fear of knowing one's HIV status, this strategy has been associated with slow uptake of services, and consequently delayed access for HIV/AIDS prevention, care and support services. The high HIV prevalence in Namibia coupled with new developments in the health care delivery system such as PMTCT, ART has called for a paradigm shift in which the provider-initiated approach to HIV counselling and testing is now offered in some health facilities as part of the standard of care. The need to observe confidentiality, informed consent, counselling and voluntarism still remains critical. Two approaches to HIV counselling and testing are therefore being used in Namibia

2.3.1 Client-initiated Voluntary Counselling and Testing (VCT)

Client-initiated counselling and testing involves individuals actively seeking HIV counselling and testing at a facility that offers these services. The counselling addresses issues such as individual risk behaviour, reasons for getting HIV testing and the development of individual risk reduction plans.

2.3.2 Provider-initiated counselling and testing (PICT)

This is a recently introduced approach which refers to HIV counselling and testing recommended during treatment by health care providers. The objective of such an approach is to enable specific clinical decisions to be made and/or specific medical services to be offered that would not be possible without knowledge of the person's HIV status. The provider-initiated approach requires health care providers to routinely offer HIV testing to patients in health settings. Ideally all patients accessing health facilities

should be offered HIV testing as part of their medical visit. Namibia has however considered a phased implementation of this approach. Currently HIV counselling and testing is routinely offered to all ANC pregnant patients, STI patients as well as TB patients. There are however plans to extend the approach to other clinical settings.

Such HIV counselling and testing is recommended by the health care provider as part of a package of services provided to all patients during clinical interactions in such settings. To avoid confusion, the terms VCT, HCT and PITC will be used interchangeably throughout the document to refer to any counselling and testing for HIV.

2.4 The Elements of VCT

VCT is an HIV intervention strategy with different but related elements. Each element is important and builds on the others. The following elements are an integral part of VCT.

2.4.1 HIV Counselling

HIV counselling has been defined as a confidential dialogue between a client and a Social Worker or trained care provider aimed at enabling the person to cope with stress and make personal decisions related to HIV/AIDS. The counselling process includes an evaluation of personal risk of HIV transmission and facilitation of preventive behaviour.

The objectives of HIV counselling are the prevention of HIV transmission and the emotional support of those who wish to consider HIV testing. Counselling will help them to make decisions about whether or not to get tested, and to provide support and facilitated decision making following HIV testing. It should be noted that people often go

for HIV testing in states of considerable anxiety because of their health, their family's health, their relationships, and their future employment. This makes the role of counselling all the more important, it can help provide confidence to get tested, and to decide on possible future courses of action for the benefit of the individual and their loved-ones. With the consent of the client, counselling can be extended to spouses and/or other sexual partners and other supportive family members or trusted friends where appropriate.

2.4.2 Voluntary testing

HIV testing may have far-reaching implications and consequences for the person being tested. Although there are important benefits to knowing one's HIV status, in many communities HIV is a stigmatizing condition and this can lead to negative outcomes for some people following testing and disclosure of their HIV status. That is why HIV testing should be done voluntarily without any form of coercion (UNAIDS Technical Update, 2000). Informed consent should always accompany every HIV testing. VCT facilities usually provide anonymous services to clients except in public health facilities where names may be used confidentially.

2.4.3 Confidentiality

Many people are afraid to go for VCT because they fear stigma and discrimination from their families and community, among other things. VCT services should therefore always preserve individuals' needs for confidentiality (UNAIDS, 2000). Trust between the

Social Worker/counselor and client enhances adherence to care, and discussion of HIV prevention. In some circumstances the person requesting VCT will ask for a partner, relative or friend to be present. This shared confidentiality is appropriate and often very beneficial. In VCT, sharing HIV results with sexual partners is recommended. In most VCT services, people are seen alone. There is however evidence suggesting that if couples receive VCT together, there is a greater potential for long-term sexual behaviour change to prevent sexual transmission of HIV (Allen S and others 1992). Without HIV disclosure to a sexual partner consistent safer sex behaviour is difficult to achieve.

2.5 The Benefits of VCT

There are many enumerated benefits of getting tested for HIV through VCT. Some of the benefits are highlighted in the discussion below.

2.5.1 HIV prevention.

As highlighted elsewhere in this document, there is evidence that when HIV testing is offered together with high quality counseling, people are more likely to make changes in their sexual behaviours. Those who test HIV positive are more likely to prevent HIV transmission to their sexual partners. It also helps those who test HIV negative to make changes to ensure that they remain negative.

2.5.2 Access to medical care.

Beside antiretroviral therapy (ART), there are many medical interventions that can prevent morbidity and mortality among people if they are identified as being HIV infected, such as:

Tuberculosis (TB) screening, treatment and TB preventive therapy (TBPT)

About a third of the 33 million HIV-infected people worldwide are co-infected with *Mycobacterium tuberculosis*, and 70% of those co-infected live in sub-Saharan Africa (De Cock and Chaisson, 1999). In countries with advanced HIV epidemics, particularly those of sub-Saharan Africa, the majority of people with tuberculosis (TB) are also infected with HIV and TB kills more HIV-infected people than any other cause (WHO,1996) Improved TB care can play a role in reducing the high morbidity and mortality of people with HIV positive individuals can be screened for TB and given curative treatment if they are found to have the disease.

Cotrimoxazole prophylaxis

Cotrimoxazole prophylaxis has been shown in several studies to reduce HIV related mortality and morbidity. It is used for treatment of opportunistic infections in people with HIV/AIDS. UNAIDS has recommended that it should be made more widely available for people with HIV, particularly in developing countries (UNAIDS, 2001).

Improved coping

Several studies have shown that VCT which provides ongoing counseling and support can help people to cope with their HIV infection and prevent serious or prolonged psychological problems following VCT (UNAIDS, 2001).

Future planning

There is anecdotal evidence suggesting that VCT can be beneficial in helping people to plan for their future as well as their dependents' future. Knowledge of HIV status can also facilitate decisions about future relationships, pregnancies and career choices.

SECTION B

This section introduces the Health Belief Model (HBM) which is the theoretical framework for the study. The model is discussed as it relates to VCT.

2.6 The Health Belief Model as it Relates to VCT

The Health Belief Model (HBM) is a behaviour determinant model which was developed in the 1950's to help understand why more people did not take advantage of an immunization programme offered by the federal government (Rosenstock, Strecher and Becker, 1994). It is one of the widely utilized conceptual frameworks for understanding, explaining and predicting health behaviour. The HBM is a psychological model that attempts to explain and predict health seeking behaviours by focusing on the attitudes and beliefs of individuals. It explains why people fail to engage in certain recommended

desirable health behaviours. The HBM stipulates that a person's health related behaviour depends on their perception of four critical areas: the severity of a potential illness, their susceptibility to that illness, the benefits of taking preventive action and the barriers to taking that action. The model also incorporates cues to action as important elements in eliciting or maintaining patterns of behaviour. The construct of self efficacy or a person's confidence in their ability to successfully perform an action is a recent addition to the model.

Literature on VCT has shown that there is a relationship between the available data with the assumptions and constructs of the HBM. Various aspects of the existing data show that most of the areas in the HBM have been explored in relation to VCT and HIV/AIDS.

2.6.1 Perceived Susceptibility:

This refers to how 'vulnerable' one feels related to a specific health problem, i.e., how likely one thinks it is possible that one will suffer from that health problem. One requires an understanding of how any health problem or issue will affect oneself to acknowledge the risk of being affected by the problem. People are not likely to change their health behaviours unless if they believe they could be at risk. Those who do not think they could be at risk are unlikely to engage in health seeking behaviours. As noted elsewhere in the study, in order for people to get tested and take precautions to protect themselves from HIV they first have to think that they are potentially at risk of becoming infected. A study conducted in Malawi in 1994, showed that about 79.0% of young people generally perceived themselves to be at risk of getting HIV. A study done three years later revealed that only 45.0% of young people felt they were at risk of getting HIV although they were

reportedly sexually active (Munthali, Chimbiri, and Zulu 2004). This shows low HIV risk perception among young people who engage in sexual behaviour which could affect their utilization of VCT.

2.6.2 Perceived severity:

This relates to one's view of the severity of the condition if they do not practice certain health behaviour. People are likely to engage in certain behaviours if they are concerned about a serious disease consequence. When one recognizes that they are susceptible to a certain problem or condition, it does not necessarily motivate them to take the necessary action unless one realizes that getting the condition would have physical, psychological and social implications (ReCAPP, 2005). People may not go for HIV testing if they only know that their risk behaviour may expose them to HIV. They may engage in positive behaviour change if they have concerns that they could be at risk of HIV infection and if infected with HIV they may get AIDS.

However, as noted elsewhere, it is argued that some people have strongly pessimistic views of what life is like for HIV positive people, often believing the inevitable consequence is depression, ostracism and a sickly, wasting body. These beliefs may cause people to think in a negative way of the consequences of reporting for VCT. On the contrary it may motivate people with a low risk perception to access VCT particularly if they anticipate HIV negative results. If tested sero-negative, such people would eventually aim to avoid getting HIV which may result in them getting AIDS and its related problems.

2.6.3 Perceived benefits:

It may be challenging to convince someone to change their behaviour if there is nothing in it for them. It is this belief that gives a person confidence to take the action because of the perceived expected outcomes. A negative test result offers a key opportunity to reinforce the importance of safety and risk reduction behaviours. People who test HIV positive often receive referrals for care, treatment and psycho-social support.

Studies were done in Tanzania, Trinidad and Kenya on the efficacy of VCT. Results revealed that there was a significant decline in the number of both HIV negative and positive people who reported unprotected sex with non primary partners after having gone through VCT (McCauley, 2004). Additionally, the same study showed a 35.0% decrease in unprotected sex amongst those who had undergone VCT and got tested, compared to 13.0% among those who just got information on HIV transmission and condom use.

2.6.4 Perceived barriers:

This refers to the perception of any negative consequences of engaging in certain behaviour. This is not limited to physical difficulty but to psychological and social difficulties as well. These could be in the form of high service and transport costs, attitudes of health workers amongst other factors. It is only when people realize that they have the capacity to deal with these barriers that they would be able to take the necessary action. Boswell and Baggaley, 2002 highlighted some barriers to VCT for young people. These barriers included, long waiting hours, high costs and pressure by health workers to notify partners, worries about confidentiality and fear of labeled and stigmatized.

2.6.5 Cues to action:

These are external events that prompt a desire to make a health change. This could be anything like VCT services readily available at a health fair, or having a relative die of AIDS. A cue to action is something that helps move someone from wanting to make a health change to actually making a change.

2.6.6 Self efficacy:

This refers to a person's belief in his/her ability to perform a particular behaviour. Faith in one's ability to do something is likely to have an enormous impact on the actual ability to do it. One should feel that they are capable of taking the necessary action correctly because it is that confidence that would motivate one to initiate and sustain the action (ReCAPP, 2005).

SECTION C

In this section literature related to psycho-social factors affecting VCT is reviewed.

2. 7 Psychosocial Factors Influencing VCT

It is sad to note that around 90% of the people living with HIV/AIDS (PLWHA) in Sub-Saharan Africa are not aware that they have the virus that causes AIDS (WHO, HIV/AIDS 2002). The magnitude of the spread of HIV/AIDS in Namibia AND elsewhere depends on a number of factors, which include levels of HIV/AIDS related knowledge, availability of treatment among the general population, quality of counseling

and testing services, access to care and antiretroviral therapy (ART) amongst other factors. Below is a discussion of literature related to factors that affect utilization of VCT.

2.7.1 HIV/AIDS Related Knowledge, Attitudes and Behaviour.

In the 2006 NDHS, respondents' knowledge about HIV/AIDS was almost universal (99% of men and women aged between 15 and 49). The knowledge levels seem to be consistent with the results of the 2000 NDHS which was at 98%. According to studies conducted by Nawa Life Trust and Nasoma in 2006, knowledge of HIV/AIDS in Namibia was rated high. However, results of the sero-surveillance survey in 2006 and the Knowledge Attitude Practices (KAP) surveys indicate that beside Namibians being very knowledgeable about HIV/AIDS, there is no significant change in sexual behaviour (Nawa Life Trust, 2007). In order for people to get tested and take precautions to protect themselves from HIV they first have to think that they are potentially at risk of becoming infected. In a study conducted among young people aged 15 – 24 in South Africa, 36.0% reported that they believed they were not at risk of contracting HIV, 35.0% reported low risk while 12% reported moderate risk and 14.0% high risk. The same study revealed that 67.0% of these young people had reported having had sexual intercourse (Pettifor et al, 2004).

When young people are asked whether they would like to be tested, they often report that they would be willing to be tested (Boswell and Baggaley, 2002). Studies conducted in Kenya and Uganda revealed that young people had strong interests in knowing their HIV

status to the extent that 75.0% of untested Kenyan youth and 90.0% Ugandan youth indicated interest to get tested in future (Horizons, 2001). However, different patterns in the process of deciding to take the HIV test emerged. Between 45.0% and 53.0% of Ugandan youth took a month or longer to get tested from the time they made the decision to get tested for HIV. About 41.0% of Kenyan youth however took the test the same day they made the decision. Half of these youth reported having taken the test in response to the referral of a service provider or because of pregnancy (Horizons, 2001). The implications are that many of these youths' decisions to get tested could have been externally motivated by service providers.

In a South African survey a large number of men and women aged 15-35 years in Johannesburg, Cape Town and Durban (83.2%) reported knowing where they could go for HIV testing. However, only 42.6% had been tested and 48.9% of those who had not been tested intended to get tested (PSI, 2006). In a study conducted in Zimbabwe, 37.0% of youth expressed willingness to get tested and where given instructions on when and where to go for HIV testing. Only 9.0% of this group went for testing (Fylkesnes, Haworth, Kwapa and Rosenvard, 1999). These findings were also confirmed by a similar study in South Africa, which confirmed that out of 60.0% young people who had shown interest in getting tested, only 11.0% reported knowing their HIV status. In a related study conducted in India among pregnant women in Southern India, the majority (86.0%) reported that they would agree to get tested for HIV. The reason cited for consenting to HIV testing was protection of their unborn babies. On one hand, the other women who stated that they would refuse to test for HIV reported that they did not perceive themselves to be at risk for HIV and some needed their spouse's permission to test for

HIV (Fauci, 2001). In a study conducted to assess women's knowledge of HIV/AIDS awareness and attitudes towards VCT uptake in a hospital in Northern Nigeria, 65% had good knowledge, 24% had fair knowledge and 11% had poor knowledge. Most of the respondents were made aware of VCT through health workers, mass media and friends (Abubakar, Aliyu, Galadanci, Kabir, and Iiysu, 2005).

Studies conducted in Malawi amongst youth showed that in the year 2000, 86.0% young males wanted to know their HIV status but only 7.0% had gone for testing (Chimbiri, Munthali and Zulu, 2004). In addition studies carried out amongst young females aged 15-24 in Malawi, revealed that 72.0% of them knew where to go for VCT but only 9.0% had actually gone for HIV testing (UNICEF, UNAIDS, and WHO, 2002). This shows that there is low risk perception compared to sexual practices amongst some people and this might partly explain why the majority of people do not go for HIV testing. In a study to determine uptake of VCT and assess changes in sexual risk behaviour following VCT in Zimbabwe, individuals who tested negative were more likely to adopt more risky behaviours. They had more numbers of sexual partners in the previous month and in concurrent partnerships (Sherr, et al., 2007). This could imply that motivation for VCT uptake was driven by knowledge and education rather than sexual risk. Increased sexual risk following receipt of a negative result may be a serious unintended consequence of VCT. This may however be minimized with elaborate pre-test and post test counseling which addresses risk assessment and reduction issues.

2.7.2 Treatment

Until recently, the option of treatment for most people living with HIV/AIDS in African countries had seemed impossible because of high costs, complicated treatment regimes and lack of basic infrastructure amongst other factors. Today the prospect of increasing resources from the donor community coupled with decreasing costs of treatment and the emergence of simpler treatment regimes provides an opportunity for more people to get tested in order to access treatment. In the late 1990s the typical daily intake for an individual on antiretroviral drugs was between six and fifteen pills a day. Today it can be as little as between two and three per day because drug makers have been able to combine several pills into one. Scale up of treatment can increase incentives for people to be tested for HIV, which can in turn promote more open public discussion of HIV issues. A longitudinal study conducted in Mombasa, Kenya found that individuals on antiretroviral drugs had lower levels of internalized stigma 12 months after commencing treatment and were more likely to disclose their HIV status to family members (Global AIDS Epidemic Report, 2008). Salient to note is that in the face of overwhelming stigma and the absence of proper treatment and support, the advantages of knowing one's HIV status are often perceived to be outweighed by the negative effect of emotional trauma (UNAIDS, 2001). The ability to plan for the future is one of the pertinent perceived benefits of testing, this is because VCT allows HIV positive people to prolong their lives through appropriate treatment. This implies that the availability of ARV treatment is likely to improve the utilization of VCT services.

A positive association between ARV provision and increased VCT utilization has been established in some countries. The Khayelitsha antiretroviral therapy programme in

South Africa offers strong evidence to support that ARV provision provides a strong incentive for people to be tested. Since the inception of ARV treatment, the utilization of VCT services in Khayelitsha has risen from fewer than 1000 HIV tests in 1998 to more than 12000 in 2002. It is argued that such increases in the utilization of VCT services have not been witnessed in areas where ARVs are not provided (WHO, 2004). It can thus be argued that in high prevalence contexts within Africa, increased VCT utilization attendant upon ARV provision could make a significant impact on prevention, by substantially increasing the percentage of people who know their HIV status.

When Botswana first offered free AIDS treatment, health authorities braced for a rush. Unfortunately it hardly came (Zavis, 2006). According to the report, most people were too afraid to get tested for HIV and this startling reluctance to get tested led authorities to revise their strategy. Though the report does not provide details about the new strategy adopted by the government of Botswana, Alwano et al., (2004) highlight that the provision of ARV by government in 2002 was viewed as a major incentive for people to get tested for HIV. As more ARV centers opened, the utilization of VCT increased dramatically from 9,761 in 2001 to 19,358 in 2002, and 23,617 in 2003. Related to the foregoing, there was a substantial increase in HIV prevalence among those testing for the first time, from 28% in 2001 prior to ARV introduction, to 35.8% in 2002, and 41% in 2004 as many sick clients could have been coming for VCT in order to access ARV.

In Guyana, initial introduction of VCT in labour and delivery wards did not increase the percentage of pregnant women tested. When this was coupled with ARV provision, the percentage of women knowing their status at the time of delivery increased from 36% to

78% (Global AIDS Epidemic Report, 2008). Pertinent to note is that introduction of treatment on its own is unlikely to eradicate negative attitudes towards people living with HIV. In a study conducted in the United States of America, where HIV treatment has been available for some time, 68.0% of Americans reported that they would be uncomfortable having an HIV positive doctor or dentist and 27.0% would prefer not to work closely with a woman living with HIV (Global AIDS Epidemic Report, 2008).

Despite the noted advances, many African countries seem to be experiencing challenges related to scaling up from the current initiatives to very comprehensive treatment programmes. Some of the anecdotal challenges relate to low and declining number of health professionals, particularly doctors and nurses. Costs of ARV drugs have declined significantly, but most of treatment programmes in Africa are donor supported implying that they have a limited lifespan. If the donor community pulls out, African governments need to find ways to foot the bills to ensure sustainability.

2.7.3 Gender and partner violence:

Gender can be defined as the widely shared expectations and norms within a society about appropriate male and female behaviour, characteristics and roles. It is a social and cultural construct that differentiates women from men and defines the ways in which both women and men interact with each other (Gupta, 2002).

Salient to note is that gender is a culture specific construct. Resultantly there are significant differences in what women and men can or cannot do in one culture as compared to another. However, what is fairly consistent across cultures is that there is

always a distinct difference between the roles of women and men, access to productive resources and decision making authority. Typically, gender norms in Africa ascribe greater decision making authority to men as compared to women. The inequality evident in gender relations that provides men with greater access to economic resources among other things, is often replicated in sexual interactions

The foregoing noted power imbalance that defines gender relations and sexual interactions also affects women's health seeking behaviours. In many societies, prevalent gender conceptions dictate that women are not expected to be decision makers regarding sex. Research data and anecdotal information seem to indicate that people assume men will decide when and how they will have sex and that it is women's duty to submit to their wishes, particularly if they are married. A study conducted in Tanzania, found that there were gender differences in the decision making that led to the use of VCT services. While men made the decision to seek VCT independently, women felt compelled to discuss testing with their partners before accessing the service, thereby creating a potential barrier to accessing VCT services (Maman, et al., 2002)

In a study conducted in Zambia and Botswana, men and women expressed concerns for women who test HIV positive because they felt that men would be likely to abandon an HIV positive partner. On the other hand, it was expected that women would initially get angry with an HIV positive partner, but ultimately accept and support him (Nyblade, and Field, 2000). Though some VCT clients report positive experiences with disclosure of their HIV status, HIV positive women may remain more vulnerable to negative effects. People who test HIV positive are encouraged to inform their sexual partners of their

status. Difficulties arise when the HIV infected person is a woman who fears domestic violence and the partner to be informed is a man she fears. In a study in Baltimore, USA researchers interviewed care providers who counseled HIV infected women. Forty five percent of the providers reported having had female patients express fear of physical violence as a result of disclosure to their partners, while 56.0% had patients who expressed fear of emotional abuse and 66.0% had patients who expressed fear of abandonment (Rothenberg, 1995). Studies carried out in some African countries have shown that fear of a violent reaction by a male partner because of a positive result, is a barrier to both VCT and subsequent disclosure of the result to male partners (USAID, 2003). According to the same study, a woman's HIV status was found to be strongly associated with partner violence, which raises important questions about violence as a risk factor for HIV infection. This confirms findings from a study conducted in Nairobi, Kenya which found that less than one third of women living with HIV had informed their partners of their HIV status, and violence against HIV positive women was common. Such violence included being chased away from their homes or being replaced by another wife and beatings (Ambani, Ndinya-Achola, Piot and Temmerman, 1995). In contrast, a study carried out in West Africa reported that more than half of the women who got tested for HIV stated that they wished to receive their test result in the presence of another person, namely their regular partner (Cartoux, 1999). Anecdotally, women are by far the sex that is most often victimized in domestic violence and sexual assaults in almost all countries of the world. Surveys in various countries have shown that many women and men have internalized gender notions condoning men's violence against women (De Bruyn, 2001). It should be noted that penal codes can also serve to positively

reinforce such ideas. In Nigeria, the penal code specifically allows husbands to physically punish their wives as long as they do not inflict serious harm (La Franiere, 2005).

Research conducted in Jamaica, India, Guatemala, Papua New Guinea and Haiti cited fear of violence acts as a significant barrier to women negotiating condom use or fidelity with their partners (Le Franc et al, 1996). As noted above, violence or threats of violence can prevent women from seeking VCT or treatment once they have contracted the virus. HIV positive women in South Africa have commented about husbands who force them to obtain antiretroviral drugs at clinics and then hand them over to the men, who do not want to be identified as HIV positive (Barnabas, Ntokozo, and Thenjiwe, 2005).

2.7.4 Social support

Social support can be defined as any physical and or emotional comfort given to an individual by their family members, friends or colleagues. For someone who tests HIV positive, it will help foster a perception that they are still part of a community of people who value and love them. A person diagnosed as HIV infected is likely to undergo considerable psychological distress. Some of the main concerns for people testing HIV positive include the need for social support, access to medical care and treatment, disclosure and planning for the future. Anger, fear, depression and denial are common initial reactions for people who test HIV positive. Women who get tested during pregnancy usually have more profound psychological distress. This is because they may not have considered the possibility that they may be HIV infected. Besides worrying about their own status, they will be concerned about their pregnancy and decisions about

terminating it or agreeing to be put on treatment such as the prevention of mother to child transmission (PMTCT) to save the child (WHO, 2000).

Because of perceived available support, arguably people diagnosed with HIV often turn to friends and family members for support. This is often reinforced by doctors and therapists when they provide counseling to patients/clients. Knowing that one is likely to get support from friends and family members if they test HIV positive would encourage them to seek VCT. However, the complexities inherent in today's families sometimes make them sources of problems rather than support. The evidence about the consequences of disclosure is limited and contradictory. A study in Tanzania found that about half of respondents reported receiving support from their partners, and evidence from Kenya and Zambia shows that the majority of HIV-positive women reported positive outcomes with disclosure, including some who feared they would not receive support (Maman, et al., 2003). However the proportion of women who reported positive reactions from their partners was significantly greater among women who had tested HIV negative, compared to HIV positive women. HIV positive women were significantly more likely to report that their partners reacted badly compared to HIV negative ones. In a study in Tanzania, partners' attitudes towards testing were however negative. According to Maman et al. (2001) the social meaning of HIV testing and what partners ascribed to these meanings proved to be important barriers in the decisions to undergo HIV testing and whether to involve partners in the testing experience. For both men and women HIV testing implied a lack of faith in the partnership and an acknowledgement of risky sexual behaviours. In the same study, some participants mentioned support from

friends, family members and other community trusted members such as priests as a factor that helped them to get tested and eventually disclose their HIV sero-status. A study conducted in Kenya revealed that 95.0% of young people, who had been tested for HIV, shared their results with someone. About 35.0% shared their results with their peers, 30.0% with their spouses and 25.0% with their siblings (Horizons, 2001). Fewer than 25.0% told their parents about their test results because they did not want them to know that they were sexually active.

Anecdotally, many people with HIV benefit greatly from the assistance provided by post test clubs and support groups. The rationale behind post test clubs is for members experiencing almost similar challenges to support each other and share experiences. However there is dearth of scientific evidence to suggest that the availability of post-test clubs/support groups would increase the uptake of VCT services. In Zambia, men were likely to attend support groups than women (26% sero-positive men versus 3% women). Those who attended support groups often did so in their own communities rather than in the support group associated with the VCT centre. In a study carried out in Zambia, of the 810 people who tested for HIV, only 150 joined Post-test Clubs (Katongo, 2000).

Although religious and spiritual beliefs and practices have been frequently associated with greater psychological well being among the sick, little is known about the specific benefits individuals perceive they receive from these beliefs and practices. In a study of adult HIV positive people, participants reported a variety of benefits from their religious and spiritual beliefs and practices. Some of the benefits cited included evoking of

comforting emotions and feelings, strength, empowerment and control, easing of emotional burden of illness, social support, and sense of belonging, relieving fear and uncertainty of death. These perceived benefits suggest potential mechanisms by which religion may affect psychological adjustment of people with HIV/AIDS (Siegel, and Schrimshaw, 2002).

Utilization of VCT services is likely to be affected by the availability of tangible or material support. In many industrialized countries there is a wide range of social support services available for people living with HIV/AIDS. In the United Kingdom people with HIV have statutory rights to certain services and there are a large number of nongovernmental organizations (NGOs) that provide materials and support services for people living with HIV together with their families and dependents. It can therefore be a considerable advantage to be aware of one's HIV status in order to benefit from these services at an early stage (UNAIDS, 2001). In high prevalence and poor African countries, the needs for social support services are often much greater than the available resources. Some countries in this category may have policies to offer free or subsidized services to people living with HIV/AIDS but because of overwhelming demand they may be cumbersome to implement. According to UNAIDS (2001), in settings where VCT services have close links to social support, these have been shown to be popular in many settings. In Uganda, TASO has been cited as a good example where comprehensive services for people with HIV are provided. It should however be noted that, even in countries where such services are provided, coverage is a challenge. In the Central African Republic, out of 2800 clients attending VCT centres approximately 350 were

sero-positive. Of this number 80% were referred for material/social support (Sehonou, Baggaley, Sulwe, and Kelly, 1999). A study carried out in Zambia found that material needs (such as food and financial assistance) were a high priority for people who tested sero-positive, but there were few resources available to meet these needs (Hamavhwa, and Howarth, 1998). Because of the current economic downturn, many of the countries that are most affected by the HIV/AIDS pandemic are also experiencing severe economic challenges. This makes it difficult for the material needs for people with HIV to be addressed. In Rwanda, HIV positive women reported their most urgent needs as material support such as food, housing and money (Keogh, Allen, Almedal, and Temahagili, 1994). It should however be noted that linking material support to VCT services is controversial. Arguably, such support may be popular with VCT clients as it encourages utilization of VCT services. Material support is often unsustainable and may lead to dependency as well as unmet expectations when donors withdraw their support. A typical example is what happened in Zambia. When VCT services were set up in Lusaka, clients who were HIV positive were eligible for maize meal donated by the World Food Programme (WFP). This popular service was however stopped when the WFP changed their policy creating dependency among clients who were benefitting (UNAIDS, 2001).

2.7.5 Outcome expectations

Outcome expectations touch on many areas including views on what life will be like if one tests HIV positive. Some people fear to be discriminated against, abandonment and abuse, marital break up amongst other possible outcomes of testing for HIV. Besides, the issue of social support, the perceptions of living with HIV/AIDS of many participants in

a study by Van Dyk and Van Dyk, (2003) proved to be a barrier for people to report for VCT. It is argued that teens have strongly pessimistic views of what life is like for HIV positive people, often believing the inevitable consequence is depression, ostracism within one's community and a sickly, wasting body. In a separate study done in Uganda, 44% of Kampala youth and 28% of Masaka youth who wanted to get tested for HIV in the future, reported that they had not done so because they feared a positive result. In a similar study in Kenya, only 14% of Kenyan youth reported that fear of a positive result was the deterring reason they had not sought HIV testing (Horizons, 2001). These beliefs cause young people to think in a negative way of the consequences of reporting for VCT. A study by Van Dyk and Van Dyk, (2003) mentions that people had feelings of fatalism and depression because they believed that there was nothing they could do about HIV/AIDS. A study of sex workers in KwaZulu Natal, South Africa revealed that they did not want a positive result disclosed to them. They believed that knowledge of a positive result would result in mental anguish, that would threaten their relationships with steady partners and they would lose clients and income (Van Dyk and Van Dyk, 2003). Of all the participants who believed that it is not advisable for every person to know their HIV status, 67, 7% believed that, knowing one's HIV status would cause depression and bring about an early death. This fatalism may prevent such health seeking behaviour like VCT. In a study conducted in Zambia, 57% of boys and 53% of girls reported that they would like to have an opportunity of getting tested. However the, majority of them were not keen to have an HIV test done at that time, as they were worried that they could test HIV positive despite the prevalence being low in their age group (Baggaley, 1997). In a study done in the Central and Southern regions of Malawi, the majority of respondents

indicated that they were not ready to be tested for HIV. The main reason cited was that they were scared they could be infected and were worried about what that would mean for their lives. The fear of being told one is HIV positive was reported as one reason people stay away from getting tested for HIV (Yoder, and Matinga, 2004). In a focus group discussion with youth in Nairobi, several untested youth expressed the fear that doctors would not share HIV test results with young clients. They strongly believed that if young person tests HIV positive, the doctor would conceal the HIV positive results to protect the young client from bad news. Because of such perceptions, some young people who participated in the study felt that testing for HIV was of little value to them. Youth who had tested for HIV in the past did not indicate similar doubts about the professionalism and honesty of their service providers (Horizons, 2001).

Abandonment and abuse are some of the perceived negative outcome expectations of getting tested for HIV. In a study carried out in Tanzania, 340 female clients were followed up for three months after having utilized VCT. The objective was to examine the relationship between HIV serostatus, domestic violence and disclosure (Maman, Mbwambo, Hogan, Kilonzo, and Sweat, 2001). The results showed that both those who tested HIV positive and HIV negative experienced high levels of physical violence. HIV positive women were more likely than HIV negative women to report a physically violent episode with their current partner. It is however not clear whether the violence which followed VCT was related to disclosure of a positive status or a reflection of the higher level of violence experienced by women who subsequently were found to be HIV positive.

Another challenging outcome expectation for married VCT clients is marital break up. A study of serodiscordant couples in Kinshasa showed that some of the couples were experiencing acute psychological distress, such as threatened suicide, a husband's family chasing the woman away from their house and accusing them of infidelity. Reconciliation was reportedly realized through intensive home based counselling, however three out of 18 couples ended up divorcing. In the above three cases all the women were HIV positive and all the men were HIV negative (Kamenga et al., 2000). It is however challenging to perceive marital break up as a negative outcome, it may also be perceived as a positive risk reduction strategy. Anecdotally, divorcing in African context is a big challenge for women who are often blamed by their family members and end up experiencing financial and material hardships.

There are a lot of anecdotal examples of discrimination following utilization of VCT, particularly for those testing HIV positive. Over the years, employment laws that discriminate against people with HIV have been challenged. HIV pre-employment screening and discrimination continues to be practiced in many African countries. In Namibia HIV pre-employment screening is practiced for all recruits for the national army. Another cited outcome expectation is psychological distress, stress and depression. Finding out that one is HIV positive will almost inevitably cause shock and distress and may also have major negative effects on the individual and the family members. In Zambia, although many people who tested HIV positive expressed sadness, anger or anxiety following testing, this was relatively short lived and no cases of attempted suicide occurred. Those who had suspected that they were HIV positive, reported having felt at

ease on receiving their HIV positive results, since they were able to plan for the future. (Baggaley, 1998)

2.7.6 Immediate test results - Rapid HIV test technology

Traditionally, HIV testing was done at central laboratories using the Enzyme Immunosorbent Assay (ELISA). This required expensive equipment and highly trained personnel to perform. Results would take an average of two weeks before they would be available to clients. As a result, about a third of the VCT clients would not come back for their results. Mobile activities were also impossible under the circumstances. The use of accurate same day tests that are easy to set up and perform became ideal for VCT, hence the introduction of rapid HIV testing technology. To achieve higher VCT coverage and return rates for results, the Ministry of Health and Social Services adopted rapid HIV testing. The rapid HIV testing algorithm used in Namibia is parallel, which implies that two different whole-blood rapid tests should be used simultaneously for every VCT client. Using this method, all results will be confirmed by two simultaneous rapid HIV tests. Any discordant results would be followed by a repeat testing using a different rapid HIV test kit called a tie breaker. In case of any disputing results after testing with a tie breaker, venous blood would be taken and send to the nearest laboratory for further testing using ELISA. All clients who test negative but have had recent risky behaviour or known exposure to HIV should be encouraged to return for additional testing three months from the time they had exposure to risky behaviour (DSP, 2005).

There is evidence to suggest that the introduction of simple-rapid HIV testing is likely to increase the uptake of VCT services. In Zambia when rapid HIV testing was introduced

in a pilot project at antenatal clinics, the overall acceptance was as high as 81% (Bhat, Bakari, Mckenna, Myrick, and Mwinga, 1998). In Malawi uptake of VCT had been low but increased four fold when the simple rapid HIV testing technology was available (Msowoya, Marum, and Barnaba, 2000). Results from a qualitative study done in a mining company in South Africa, showed that the relatively high uptake of VCT at the workplace appeared to be a function of the convenience afforded by rapid HIV testing (Bhagwanjee, Petersen, Akintola, and George, 2008). When the National AIDS Control Programme in the Democratic Republic of Congo (DRC) introduced rapid whole blood HIV testing at three different primary health facilities in Kinshasa namely Matonge, Victoire, and the CTA Kinshasa, the uptake of VCT services significantly increased. These sites offered specific prevention and care activities to commercial sex workers (CSWs), individuals with sexually transmitted infections (STIs) and people living with HIV/AIDS (PLWAS) respectively. The return rate for HIV test results was assessed in the three sites before and after introducing rapid HIV testing. Prior to introducing rapid tests, HIV testing was done using ELISA. After introduction of rapid HIV testing in the Matonge clinic 83% clients received their HIV test results while in the Victoria clinic 91% of tested clients received their results. In the CTA, 92% of all tested clients received their HIV test results. The respective return-rates before introducing rapid HIV testing in the same sites were 46%, 65%, and 67% respectively. With the rapid testing strategy, all individuals received their results the same day while with ELISA there was an average delay of 7 days (Van Overloop, Mpanya, Kabamba, Pedrique and Zachariah, 2004).

USAID has been one of the major proponents and user of rapid HIV testing for the past five years. In countries in which rapid HIV tests are not yet widely available, many

people do not return for their HIV test results. In countries in which rapid HIV tests have been made available, USAID-supported services have found that a change to same-day results led to a significant increase in both the number of VCT clients and the proportion of clients who actually received their test results. The introduction of rapid testing in Zimbabwe increased the portion of clients who returned to receive their results from 77 % to 99 %. Demand for the service also increased substantially as the new convenient nature of the services was promoted to potential clients (PSI, 2006). Both the distance people must travel to receive their HIV results and the delay between the time of testing and availability of results can reduce the numbers of people who receive their test results. The cited studies reveal persistently high HIV testing acceptance levels when people are offered HIV testing and immediate test results. Reasons for this may include both reduced transport costs and the perception that immediate test results availability is less stressful than having to wait for too long.

Rapid HIV testing avoids transportation of samples to laboratories and ensures that women presenting late in pregnancy can receive their results prior to labour and delivery. However, a study of rapid testing among pregnant women attending clinics that offered HIV testing from 2001 as part of a postnatal transmission study, found little interest in the same-day result that rapid testing allows. According to the results, rapid testing had no effect on the proportion of women agreeing to have an HIV test (Mkwanazi, et al 2008). This could imply that women wanted time to consider their personal risks and support networks before accepting results. It is also important to understand that the needs of pregnant women and their abilities and readiness to receive HIV test results may differ

from ordinary clients. Depending on the quality of counselling provided to the pregnant women, there is a possibility that some women are not afforded the time to consider whether they want their results immediately or not. Pregnant women may not be given the opportunity to be appropriately counselled, or given enough time to reflect upon the advantages and disadvantages of knowing their HIV status and make an informed decision when rapid tests are used. It is critical to ensure that pregnant women are given choices on whether to receive their results immediately or at a subsequent antenatal visit. It should also be noted that in many African countries, rapid HIV testing coverage is low. In Namibia, slightly more than 50% of public health facilities offer rapid HIV testing. In settings where rapid HIV testing is unavailable, up to 50% of people do not collect their results. In a study conducted in West Africa, HIV positive women were three times less likely to return for their results than uninfected women (Cartoux, 1999). This could have been related to fear of disclosure of HIV status and or the risk associated with unfaithful partners rather than unavailability of rapid HIV testing which caused women to fail to return for their results.

2.7.7 Stigma and Discrimination:

The response to HIV/AIDS is increasingly conceptualized as a continuum between prevention and care, and the effects of stigma and discrimination can also be framed within this model. Ideally, people seek counselling and testing in order to identify their HIV status without fear of repercussions. Those who test HIV positive, then receive available care, and are encouraged to change their behaviours to protect others from infection. A stigmatizing social environment, however, poses barriers at all stages of this

cycle. People fear discrimination and thus refrain from seeking testing. People who test HIV positive may receive substandard treatment, and may refrain from disclosing their HIV status to partners to avoid negative reactions. They may not seek care and support, nor contribute to reducing future transmission, thereby hampering the efforts of HIV and AIDS interventions.

Perloff, (2001) gives explanations of why people stigmatize people living with HIV/AIDS (PWHAs). He argues that people are simply afraid they will contract HIV when they are 'exposed to' PWHAs. A second explanation for AIDS stigma emphasizes associations between AIDS and social objects. For example, HIV and AIDS may be associated in an individual's mind with homosexuals and drug users. When one has negative feelings about homosexuals, these feelings will come into a person's mind when they think of HIV and AIDS.

In Thailand, news reports stated that despite almost a decade of the epidemic and continued public health advocacy, AIDS orphans have been forced to leave their former villages. As way back as 1999, HIV positive children were denied entry to schools, and some hospitals continued to refuse to treat known people living with HIV and AIDS (PWHAs) (Sarjana, Wiyadnyana, and Kauci, 1999). In Indonesia, families in Bali have been found to separate the household items, clothing and personal belongings of PWHAs. Sometimes the entire family would experience rejection by the wider community (Sarjana, Wiyadnyana, and Kauci, 1999).

Being stigmatized is a consequence that people fear when they report for VCT. Therefore, stigma can determine the attitude toward reporting for VCT. Van Dyk and

Van Dyk, 2003) name fear of discrimination from health workers and fear of breach of confidentiality by health workers as important stigma barriers. The study revealed that some people believed that health workers would disclose their status to their family after the test. Fear of rejection by family and community members if their HIV results were disclosed was cited by participants. Study participants also reported that the majority of clients, who would report for VCT, would go to a clinic where nobody knew them, so that their family and friends would not find out about it. Another challenge cited is that in black communities, health care workers are familiar with most clients, this is because of interweaved community life and extended family systems. As such, health care workers/counselors sometimes see it as their moral duty to inform family of test results thereby breaching confidentiality.

The foregoing is confirmed by the HSRC study of 2002. According to this study 19.8% of people who knew about VCT services actually made use of these services. Of participants who never went for a test, 59.4% said they would seek VCT services if confidentiality was maintained (HSRC, 2002). This may suggest that reasons for seeking VCT may be more closely related to negative perceptions (beliefs) of services (and indirectly to stigma) than to the availability of services. Anecdotally, stigma plays a role in young people's social environment. Young people may be afraid to report for VCT because their sex partners and peers would think they are "not clean" Teens only tell a very limited number of people that they had been HIV tested, as doubt and suspicion would be raised among their peers. This implies that peers have a lot of influence on the behaviour of youngsters. This means that the outcomes of the behaviour (reporting for

VCT) could lead to negative reactions from their social environment. Resultantly this would affect young people's attitudes towards VCT in a negative way.

The assertion that, in some countries where VCT services are established there has been a reluctance of people to utilize such services is supported by the UNAIDS (2000), which suggests that this could be because of denial, stigma and discrimination that people who test sero-positive may experience. The UNAIDS, further notes that in some countries people with HIV and AIDS are subject to discrimination at work or in education. The publication does not cite scientific evidence to support the foregoing statement. However studies carried out in Zambia and Kenya have shown that women may be vulnerable following VCT and in some cases have lost their homes and children if their status became known (Temmerman, Ndinya-Achola, Ambani, and Piot, 1995). There is evidence that, in highly stigmatized societies, women who believe themselves to be at high risk of infection are less likely than low risk women to access VCT services (UNAIDS, 1999). Salient to note is that one of the underlying principles of Namibia's expanded national HIV and AIDS response is 'reduction of stigma and discrimination'. Under this principle there is acknowledgement that the adverse impacts of stigma and discrimination are being increasingly recognized as key barriers to combating the epidemic. Commitment to reducing stigma and discrimination is therefore highlighted as a central guideline and principle in all strategies contained in the Government's 'Medium Term Plan 111 for HIV and AIDS' (DSP, 2004).

In some contexts, HIV and AIDS related stigma has been reinforced by religious leaders and organizations, which have used their power to maintain the status quo rather than challenge negative attitudes towards PLHA. Such religious doctrines, moral and ethical positions have helped create the perception that those infected with HIV have sinned and deserve to be punished. This is likely to discourage people from seeking VCT services. The foregoing literature suggests that people may be reluctant to access VCT services because of fear of stigma and discrimination. This is, beside the fact that VCT has long been recognized as an important entry point that enables people infected with HIV to live positively and access appropriate services and support. Despite high levels of awareness and knowledge, HIV/AIDS remains highly stigmatized in many parts of Africa and Namibia is no exception. People's lived experiences of AIDS consist mainly of pain, isolation and death, which in turn evoke feelings of hopelessness. Anecdotally, there is tremendous fear and reluctance around being tested for HIV.

2.7.8 Quality of services

According to Van Dyk and Van Dyk (2003), in principle clients are not against VCT, but they have serious doubts and anxieties about the confidentiality of HIV test results. Fear of the lack of confidentiality was a key barrier preventing clients from participating in VCT services in Kenya. Other problems identified included ignorance of the benefits of knowing one's status and as highlighted above, fear of both the stigma of being tested and of being HIV positive (Arthur, Mutemi and Odhiambo, 2000). The report further notes that, apart from clients' fear that health workers would breach confidentiality, they also feared disclosing their HIV positive status to their sex partners. As noted elsewhere, many clients prefer not to report for VCT in clinics or hospitals because of stigmatization

and lack of confidentiality. According to Van Dyk and Van Dyk (2003), many hospitals in South Africa have special rooms for HIV counselling. This makes it difficult for clients to go to these facilities because they fear being labeled HIV positive. It is further reported that confidentiality is a huge stumbling block in the provision of comprehensive VCT services in South Africa. As may be the case in Namibia, African communities have closely-knitted community life and extended family systems. Consequently, it is often inevitable for health workers to be familiar with most of the clients that come for counselling, and their roles as counselors, friends and family often become blurred (Van Dyke, 2001). As highlighted earlier, the attitudes of health workers/counselors play a crucial role in determining the utilization of counselling and testing services by young people. Unmarried but sexually active adolescents in Bangladesh reported that they did not feel comfortable seeking family planning or STI services from nearby clinics and pharmacies and perceived providers to be judgmental and unfriendly (Bhuiya, Rob, Khan, and Alkabir, 2000).

In a study of people who were not tested before, and who did not plan to get tested, Philips, Coates, Eversley and Catania (1995) discovered that participants, especially women in stable relationships were only willing to be tested if no one else could have access to their results. Additionally, a study by Pool, Nyanzi and Whitworth (2001) on the attitudes of participants towards HIV VCT among pregnant women in rural South West Uganda, found that although the women were prepared to be tested, there was a widespread fear that if they were HIV positive, maternity staff might refuse to assist them when they delivered their babies.

In a study by Van Dyk and Van Dyk (2003) in South Africa, participants were asked whether they would go to their nearest clinic or doctor for VCT. A total of 67% of the 1422 participants reported that they would go to their own clinics or doctors, while 32, 8% said they would go to a clinic or doctor where nobody would know them. Some of the reasons cited by participants were related to lack of trust in the health services close by. On one hand, reasons cited by participants who preferred to attend a clinic or VCT where nobody would know them included; a distrust of the health care system, fear that confidentiality would not be observed, fear of rejection and prejudice by health workers as well as preference for total strangers. Anecdotally, many counselors seem to breach confidentiality of HIV status on the understanding that it is their 'moral duty' to disclose a client's HIV status to the partner in order to 'protect them'. Nurses who participated in a focus group discussion in an HIV and AIDS counseling programme in 2002, admitted that they had often taken up this 'moral policing role' in the past by notifying partners or family members of the HIV-positive status of their clients (Van Dyk and Van Dyk 2003).

Studies conducted in Malawi revealed that young people require services that are provided by health care workers who are friendly and whom they trust to keep confidential any information they get from young people (National Youth Council of Malawi, 2000). Client exit interviews conducted at an AIDS information center in Uganda revealed that as many as 90.0% of young people interviewed preferred friendly health care providers, 74% liked professionalism in health care providers, 87% appreciated a warm reception on arrival while 30% liked confidentiality of results (Horizons, 2004).

Studies conducted in Kenya indicated that some VCT sites were well equipped and prepared to respond to young people's issues. Service providers who were interviewed at some of the VCT facilities reported that, though they were providing VCT to young people, they had little preparation and experience in handling young people (Horizons, 2001).

It is salient to note that VCT services have different ways of reporting HIV results, and this may influence utilization of VCT services, especially where people are worried about confidentiality. Many VCT facilities offer anonymous and confidential services. VCT clients often use code names and numbers and test results are usually kept at the VCT facility, however if an HIV positive client requests for a referral anonymity falls away. A study in the United States of America looked at the effect of using names for VCT clients on the utilization of VCT services. This study was carried out in publicly funded VCT programmes. It was feared that the use of names would negatively affect the uptake of VCT services. There was however no significant effect on utilization of VCT services, in some states a few cases of statistically non significant reduction in testing among African Americans were reported (Nakashima et al., 1998).

A study conducted by Population Services International in Vietnam, showed that many women wanted VCT facilities to be anonymously located in large health facilities. On the other hand all men preferred VCT sites to be discreet. They desired VCT facilities that are separate from large health facilities. Additionally, participants preferred informational signage to provide detailed information about the VCT facilities without use of the words HIV and AIDS (PSI, 2005). Kind, sympathetic and respectful staff who do not discriminate against vulnerable and most at risk populations such as commercial sex

workers, men who have sex with other men amongst others were preferred in the same study. According to the study, the above mentioned groups are used to being treated rudely or dismissively by health workers. A welcoming supportive atmosphere would help change the perception of potential VCT clients. As highlighted elsewhere in the study, commercial sex workers would prefer to be counseled and tested by health care workers they are not known to. According to the study, some participants preferred to travel out of their neighbourhood to decrease the likelihood of being identified by familiar health facility staff members. One pertinent factor highlighted by participants was that VCT facilities should be conveniently located, participants expressed concerns regarding travelling long distances to and from VCT facilities (PSI, 2005). Another factor related to the quality of services highlighted in the study was issuing of accurate and reliable results. There were concerns and doubts about the precision of laboratory results. Again the new technology of issuing HIV test results immediately through rapid HIV testing was another concern. Though the short waiting period was viewed as desirable, concerns were raised about the accuracy of results issued within such a sort period of time (PSI, 2005)

2.7.9 Affordability of VCT services

A study of young couples in rural regions of western Kenya, suggests that cost factors can significantly affect uptake and acceptability of VCT services by young people. If counseling and testing was offered free of charge, 95.0% of the participants reported that they would accept the service. When the counseling and testing was offered at a cost of

around US\$4, 00 between 31.0%-40.0% of the participants reported that they would take the test (Damesyn, Stiehm, Neumann, Morisky and Omwomo, 1998).

About 30% of untested Ugandan youth and 13% of untested Kenyan youth cited cost as a reason they have not had a test. The study highlights that such findings were common in typically rural communities (Horizons, 2001).

In Windhoek, the free standing VCT facilities do not charge service fees to clients whereas the integrated public health facilities charge a service fee of N\$15, 00. Some people might be ignorant about the free services at free standing VCT facilities as well as the nominal fee charged by public health facilities. There is need to establish people's perceptions regarding the effect of costs on VCT uptake. To continue

2.8 Summary

This chapter gave the historical perspective of VCT as well as details of what VCT entails. The discussion highlighted that, significant implementation of VCT was witnessed in 2003 and since then the government of Namibia has promoted provision of VCT in diverse settings. The chapter has also highlighted that there are two main approaches to HIV counseling and testing namely, voluntary counseling and testing (VCT) and provider initiated counseling and testing (PICT). Additionally, three main elements of VCT were highlighted in the discussion, these are HIV counseling, voluntary testing as well as confidentiality. The chapter also discussed literature relevant to factors affecting utilization of VCT in relation to the HBM constructs. The literature has suggested that availability of treatment, stigma and discrimination, social support, quality of services and rapid HIV testing are some of the pertinent factors affecting utilization of VCT services. It emerged that there is dearth of substantial scientific VCT literature

relating to Namibia, however most of the literature related to the subject matter was drawn from other African countries. Salient to note is that previous research on the predictive utility of the HBM for HIV prevention behaviour, suggested that perceived susceptibility, benefits and barriers were the strongest predictors of HIV preventive behaviours.

The next chapter focuses on the research methodology that was used in this study. This will include the research design, sampling, data collection and data analysis procedures.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the research methodology which includes the research design, sample size and selection process. The pre-testing of the data acquisition instrument together with the data processing will be discussed.

3.2 Research Design

An exploratory descriptive cross sectional research design was utilized to gain insight into factors affecting the utilization of VCT services in Windhoek. The aim of the study was to explore rather than explain psycho-social factors affecting VCT uptake. In so doing the study laid a pertinent foundation for subsequent research in the subject area. The study utilized structured quantitative methods to solicit information about perceived factors affecting utilization of VCT services. Epi-Info version 6.0 was used to design the quantitative questionnaire as well as for data entry. Statistical Package for Social Sciences (SPSS) version 11 computer programme, was utilized for statistical data analysis.

Exploratory studies address issues that have not previously been studied and make an attempt to identify new knowledge, new understandings, and new meanings and to explore factors related to the topic. Salient to note is that exploratory research studies are critical in the development of social work knowledge because they form the basis of future research. This design was appropriate for this study because it aimed at providing

an understanding of psycho-social factors affecting VCT which is an entry to treatment care and support for those who test HIV positive. There was no previous study conducted to gain insight into factors affecting utilization of VCT in Windhoek, therefore an exploratory cross sectional design was suitable to acquire base-line data on the subject area.

3.3 Sample Selection Process

The study utilized a two-stage cluster design. In the first stage, primary sampling units (PSUs) were selected using probability proportionate to size. The information about the study area was obtained from the master sample frame of PSUs created from the enumeration areas of the 2001 Population and Housing Census, where the size measure was the number of households within each PSU. In the second stage, households within the selected PSUs were selected using simple random sampling. In households where more than one eligible respondent was available, the respondents were listed as final sampling units. If there were no people at a selected household, two callbacks were done before substituting with the adjacent household. At least three callbacks were done before substituting the selected household. Substitution was also done when the initially selected respondents refused to be interviewed.

3.4 Sample Size

The sample size (n) was calculated based on the following formulae:

$$n = \frac{z^2 * p * q}{E^2}$$

where, $z = 1.96$, taken as 2

$p = 0.5$, since the order of the prevalence is unknown

$q = 1-p$

$E = 7\%$ absolute margin of error

Under the above-mentioned conditions, the sample size (n) would have been **200** individuals assuming the design was a simple random sample (SRS). However, in reality it could not be used because the list of individuals was not available for this suburb. Therefore the alternative was to use the cluster sample design. Generally, in cluster sampling the precision of the estimates is lowered compared to the SRS. To compensate for this loss in precision, the sample size had to be raised using the design effect (DEFF). Since DEFF was also unknown it was taken to be 2, therefore the sample size under the cluster design was raised to **400** individuals.

3.5 Coverage and response rates

All the four sampled PSUs in the suburb were covered. Usual non-response categories such as refusals and non-contacts were negligible, but there were a larger number of non-eligible households (where the target population aged 15-49 years was not present). This

reduced the number of respondents who were interviewed to **200**, which is within reasonable margin of error.

3.6 The inclusion criteria:

- Male and female adults who were aged 15- 49 years.
- Male and female adults conversant in either Afrikaans or English.
- Male and female adults who were able to provide informed consent.

3.7 The exclusion criteria:

- Adults who were younger than 15 years.
- Adults who were not conversant in either Afrikaans or English.
- Adults who declined to participate in the study either before or during the interview process.

3.8 Listing

A week prior to data acquisition, a complete listing of households in the 4 selected Primary Sample Units (PSUs) was carried out from which a sample of 20 households per PSUs was selected for interviewing. The listing exercise, including identification of PSU boundaries and familiarizing of the areas was carried out by the researcher and two assistants. Some of the challenges noted during the listing exercise were that some of the household heads were not available, some of the households had less than 5 eligible adult members aged 15 – 49 and some household members were unavailable even after two

visits. In some cases the houses were locked. All the listed elements in each household became part of the observation units. An observation unit or unit of data collection is an element or aggregation of elements from which information is collected (Babbie and Mouton, 2007).

3.9 Pre-testing of the instrument

The English questionnaire was translated to Afrikaans and translated back to English before it was pilot tested. The pre-testing of the instrument entailed interviewing males and females aged 15 to 49 who met the set eligibility criteria. The pilot-testing was conducted in a section of Greenwel Matongo which was not part of the four selected PSUs. Consequently all people who participated in the in the pre-test id not participate in the actual study because they had been exposed to the intervention already. The pre-test was used to check understandability of questions and procedures for conducting interviews. The information obtained was used to revise the questionnaire based on the following points: ease or difficulty of statement, comprehension, confidence in response, level of discomfort and social desirability.

3.10 Data Collection

A pre-tested structured questionnaire was used to collect quantitative data from respondents. This was administered face to face by the researcher and two research assistants. The interviews were conducted from Monday to Saturday to accommodate clients who were not reachable during the week. A structured questionnaire with close-

ended questions was used to ensure that all respondents were asked exactly the same set of questions in the same sequence. The interviews were conducted in the preferred languages of the study participants. The choice of languages was however limited to English and Afrikaans. Two trained research assistants fluent in both languages were engaged to assist with data acquisition. The questionnaire consisted of the following sections (annex):

- Socio-demographic information of the respondents
- Questions which looked at the HIV status of participants and general knowledge about HIV/AIDS
- Questions related to rapid HIV testing, social support, outcome expectations, availability of ART and quality of VCT services.

3.11 Data Processing and Analysis

Data processing and analysis commenced in the field by ensuring that all the information on the questionnaire was properly collected, recorded and checked for completeness of data and internal consistency at the end of each day. Each completed questionnaire was assigned a number bearing the name of the person who conducted the interview. This was done in order to seek clarification from the interviewers in case of any missing information. All the collected data was entered into the computer and routine checking and cleaning of data was performed. The data was analyzed with the Software Package for Social Sciences (SPSS) version 11.0. Analysis entailed the production and interpretation of frequencies counts, tables and graphs that described the data.

3.12 Summary

This chapter discussed the research methodology that was employed in the study. An exploratory descriptive cross sectional research design was utilized to gain insight into psycho-social factors affecting VCT. The study utilized a quantitative data acquisition instrument for data collection. The instrument was pilot tested before the final data collection field work. A two stage cluster design sampling method was used. The collected data was entered into the computer and analyzed using SPSS version 11.0.

The next chapter will discuss the results of the study.

CHAPTER 4

ANALYSIS AND DISCUSSION OF RESEARCH RESULTS

4.1 Introduction

This chapter presents and discusses results of the study. The chapter is divided into three main parts, namely presentation and discussion of the socio-demographic characteristics of study participants, knowledge about HIV/AIDS including HIV status and presentation and discussion of the findings as they related to the study objectives. The purpose of the study was to explore and collect baseline data on psycho-social factors affecting utilization of VCT among people aged 15 to 49 years in Windhoek. The interviews were conducted from 17 to 26 November 2008. The data obtained from 200 respondents was analyzed and will be presented in this chapter.

4.2 Socio-Demographic Characteristics of Study Participants

This section will present the characteristics of the study participants regarding their sex, age, education, marital status, activity status and education.

4.2.1 Age and Sex Distribution

The age distribution of study participants ranged from 15 to 49 years. Table 2 indicates that among all the age groups, the majority (23.5%) belonged to the age group 30 to 34 years while only 8% of the respondents were in the age group 45 to 49 years. The sex ratios by age group are also shown in Table 2. Female respondents were more than males

in the ages 39 years and below while males dominated in the older ages of 40 years and above.

The findings reflect similar findings to those in the NDHS 2006, where younger age groups (under the age 35) represented a higher proportion of the population than the older groups and this distribution has been the trend in the previous NDHS surveys. Overall there were more females (55%) than males (45%) in the study. Although the distribution may not be representative of the entire geographical or study area, it does reflect some significant trends. The sex distribution mirrors the 2001 Population and Housing Census results for Namibia which reported that females make up to 51% of the whole population. Additionally, the 2006 NDHS reported that 53% of the study participants were females and 47% were males. The excess of females over males has been observed since the 1992 NDHS in both rural and urban settings.

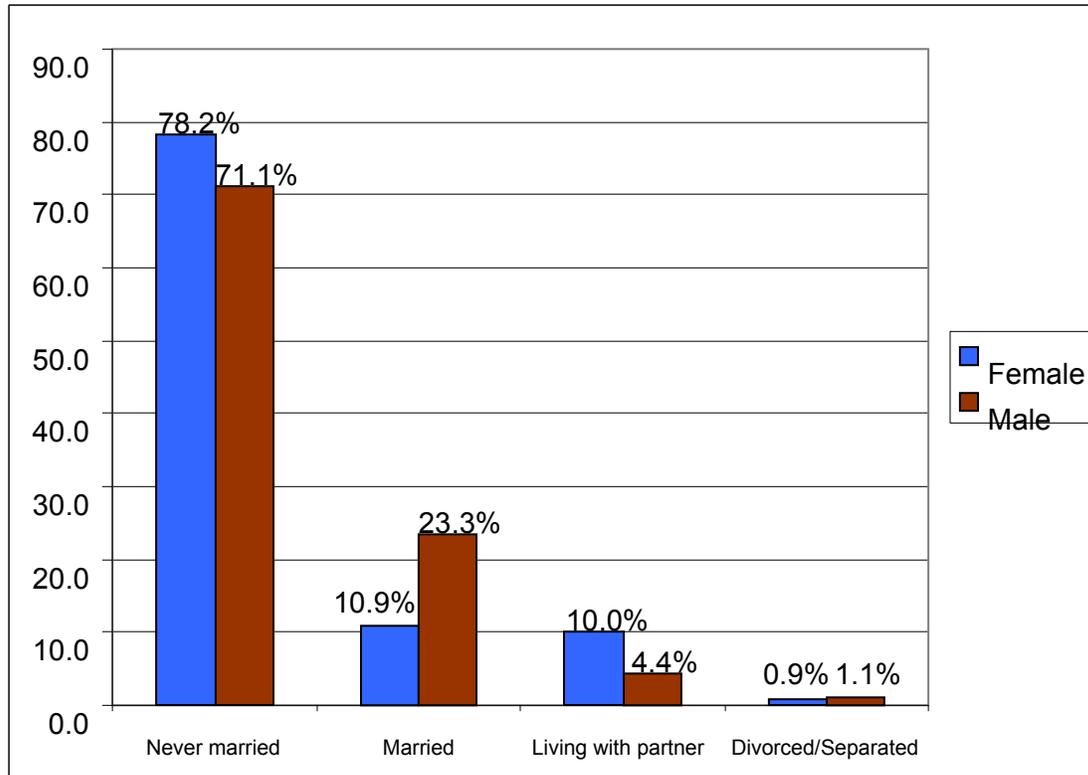
The difference in the numbers of females and males who participated in the study does not have a significant impact on the results which remain comparable because both genders are represented in the sample.

Table 2: Percent Distribution of Respondents by Age Group and Sex

Age group	Sex		Total (N=200)	Sex Ratio
	Female (N=110)	Male (N=90)		
15-19	11.8	13.3	12.5	92
20-24	20.0	12.2	16.5	50
25-29	15.5	12.2	14.0	65
30-34	25.5	21.1	23.5	68
35-39	15.5	15.6	15.5	82
40-44	6.4	14.4	10.0	186
45-49	5.5	11.1	8.0	167
Total	100.0	100.0	100.0	82

4.2.2 Marital status of participants

According to the findings, 75% of all the study participants were never married during the time of data acquisition. As shown in figure 1 below, 78.2% of women were never married while 71.1% of men reported the same. Though fewer respondents (17%) were married, men were almost two times more likely to be married than their women counterparts (23.3% and 10.9%, respectively). Only 1% of the study participants were either divorced or separated and the remaining 7% were co-habiting. Though the pattern is different, the results are comparable to the 2006-07 Namibia Demographic Health Survey (NDHS) results. According to the NDHS results, 65% of men and 58% of women had never married at the time of the survey. ‘Many women in Namibia bear children without entering a stable union. Visiting relationships are common and many women have children in the context of such unions. Marriage occurs relatively late in Namibia and a large proportion of women never marry’ (MoHSS, 2008). On the other hand men are also less likely to be married and some of them tend to marry at an older age than women.

Figure 1: Marital status of participants

4.2.3 Activity status of participants

It should be noted that measuring employment is challenging. To avoid missing out on people likely to be perceived as unemployed, the study asked all the respondents the employment category in which they fell under. Seventy nine percent of all the study participants were economically active, while 21% were economically inactive. Table 3 shows that of all the economically active respondents, 51.3% were employed and 48.7% were unemployed. Also, among the few economically inactive respondents, the majority (71.4%) were students. The high unemployment reflected in the findings could reflect the socio economic status of the study area. Greenwell Matongo is a high density residential

suburb in Windhoek where less affluent people reside. Though Namibia is classified as a lower middle income country, it has one of the highest income inequalities in the world. Since independence, the Government of Namibia has pursued policies and programs to reduce poverty, including the formulation of a Poverty Reduction Strategy Plan (PRSP) in 1998. A number of the policies and strategies have been incorporated into the long-term Vision 2030. Of the total population, 35% are estimated to be living below the poverty line of US\$1 a day (MoHSS 2009). Though most of the poor live in rural areas, there seems to be an increase in the rural urban migration resulting in the urban infrastructure being overstrained. Poverty has been one of Namibia's development challenges since independence. The effects of poverty are manifesting themselves in different forms including income inequality, low human development, social exclusion, ill being, lack of capacity and function, relative deprivation, vulnerability including uncertain livelihoods and lack of means to meet the basic needs.

Table 3: Percent distribution of Employment status and Economically Inactive study participants

Background Characteristic	Percent	Number
Employment Status		
• Employed	51.3	81
• Unemployed	48.7	77
Total	100.0	158
Economically Inactive		
• Student	71.4	30

• Other	29.6	12
Total	100.0	42

4.2.4 Educational Status of Participants

Table 4, shows the distribution of the respondents by the highest level of education attained and sex. A total of 11.5% of all the study participants had never been to school, 58% reported having attained secondary education and 6% completed University or higher education. Around 8% of females and 15% of males reported no education. The findings resemble the characteristics of participants in the 2006 NDHS. The survey concluded that the majority of Namibians have some formal schooling. According to the survey only 7% of women and 9% men in Namibia had never gone to school. The results are pertinent in that studies conducted in a number of countries revealed that 69% of young people who had secondary and higher education, knew where to get tested compared to 38% and 20% of those who had primary education and no education respectively (UNICEF, UNAIDS and WHO 2002). Though it was beyond the scope of this study, further studies can help establish if educational levels do influence people's decisions to seek HIV testing.

Table 4 Percent Distribution of Respondents' Level of Education by Sex

Level of Education completed	Sex		Total (N=200)
	Female (N=110)	Male (N=90)	
Primary	16.4	34.4	24.5
Secondary	60.9	54.4	58.0
University or Higher	8.2	3.3	6.0
No education	14.5	7.8	11.5
Total	100.0	100.0	100.0

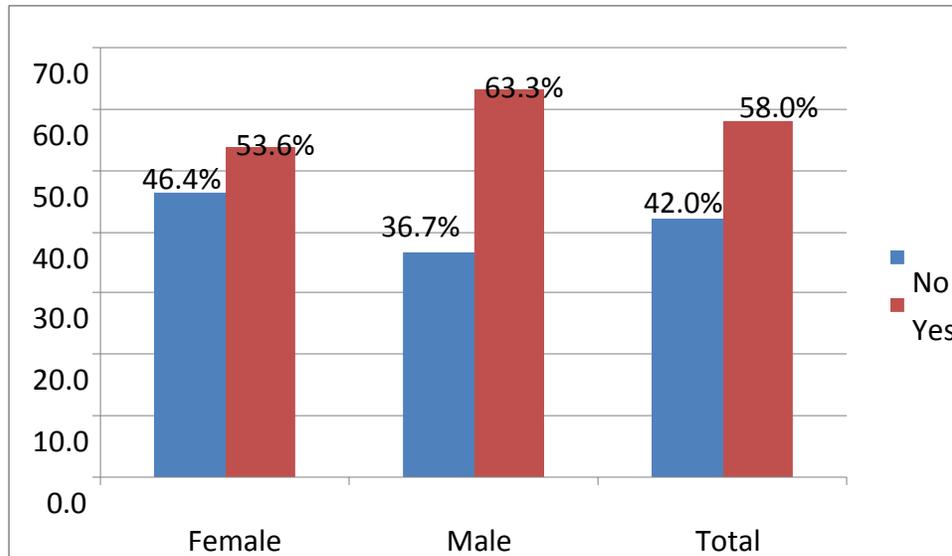
4.3 Knowledge about cure for AIDS

Participants were asked if there was a cure for AIDS and if they knew of any treatment for HIV. Eight nine percent of all the respondents reported that there was no cure for AIDS. Of all the participants who reported that there was no cure for AIDS, the highest (22%) were in the age group 30 to 34 years, (18%) were in the age category 20 to 24 years, 16% were in the 35 to 39 year age group, 14% were in the 25 to 29 age category and 13% were in the 15 to 19 age category. Only 9% and 8% were in the age groups 40 to 44 and 45 to 49 respectively. It can be argued that in general, Namibians have good knowledge about HIV/AIDS. In the 2006-07 NDHS, respondents were asked whether they had heard of AIDS. The results showed that knowledge of AIDS was almost universal (99% for both men and women aged 15-49). The results from the current study could have been slightly lower, unlike in the 2006-07 NDHS, study participants were asked more technical questions about the cure and treatment for AIDS. While antiretroviral (ARV) medications for treating HIV have been developed there seems to be misconceptions amongst the ordinary people as to whether these drugs cure or treat HIV/AIDS. These drugs have markedly improved the quality of life for those consistently on treatment. ARV therapy only delays the progression of the disease and does not cure the infection.

4.3.1 Knowledge about treatment for AIDS

Having 89% of study participants reporting sound knowledge about unavailability of a cure for AIDS is good. It may imply that participants knew that once one is infected with HIV they have to accept and live with it. However, in the absence of a cure for AIDS some people may get comfort from learning that there is treatment that can prolong people's lives. In order to gauge participants' understanding of the availability of treatment for AIDS, participants were asked if they knew of a treatment that could prolong the life of a person living with HIV/AIDS. Figure 2 shows the distribution of responses. Fifty eight percent of all study participants reported that they knew such treatment existed. Knowledge level was higher amongst males (63.3%) compared to females (53.6%). The 15 to 19 age group did not seem to be very knowledgeable about availability of a treatment for AIDS, only 10% of the participants in this age group were knowledgeable. Amongst the 20 to 24 age group, 16% reported that they knew of a treatment for AIDS and 18% in the age group 25 to 29 also reported the same. The most knowledgeable age group was the 30 to 34, which had 27% of the participants reporting that they knew of a treatment for AIDS.

Figure 2 Knowledge about treatment for AIDS



4.3.2 Knowledge about ARV Therapy

All women and men interviewed in the study who knew of a treatment that could prolong the life of a person living with HIV/AIDS were able to cite ARV as the treatment. Of those who could cite ARV as the treatment, 26.7% were in the 30 to 34 year age group. Participants' knowledge about HIV/AIDS was generally high. As noted in the preceding literature, knowledge about availability of treatment is pertinent in the sense that it may give people hope to go for HIV testing. Though 58% of the study participants were knowledgeable about availability of treatment, the findings could also suggest that information about availability of treatment for AIDS may not be readily available for some people. Resultantly, people may shy away from accessing HIV testing for fear of testing HIV positive in a context where information about treatment is unavailable. Sometimes feelings of fatalism and depression are reported by clients who believe that there is nothing they can do when they test HIV positive. According to Van Dyk, and Van Dyk (2003), such fatalism may actually prevent any form of positive behaviour

change. In the same study, 15% of HIV positive women felt that it would have been better not to have known their HIV status, because there was no cure for HIV infection. Though this may need further exploration, it appears that information about ARV treatment may not be comprehensively available to all Namibians. It is thus logical to assume that the better and more comprehensive such information dissemination becomes, the more likely that such information may result in people considering utilization of VCT services. Since knowledge alone may not result in sustainable behaviour change, there is need to package such knowledge in a way that would result in people taking action.

Table 5: Percent Distribution of Participants who are knowledgeable about HIV treatment and could cite ARV as treatment by Age group and Sex

Age group (years)	Sex		Total (N=116)
	Female (N=59)	Male (N=57)	
15-19	13.6	7.0	10.3
20-24	18.6	14.0	16.4
25-29	20.3	15.8	18.1
30-34	27.1	26.3	26.7
35-39	13.6	14.0	13.8
40-44	3.4	14.0	8.6
45-49	3.4	8.8	6.0
Total	100.0	100.0	100.0

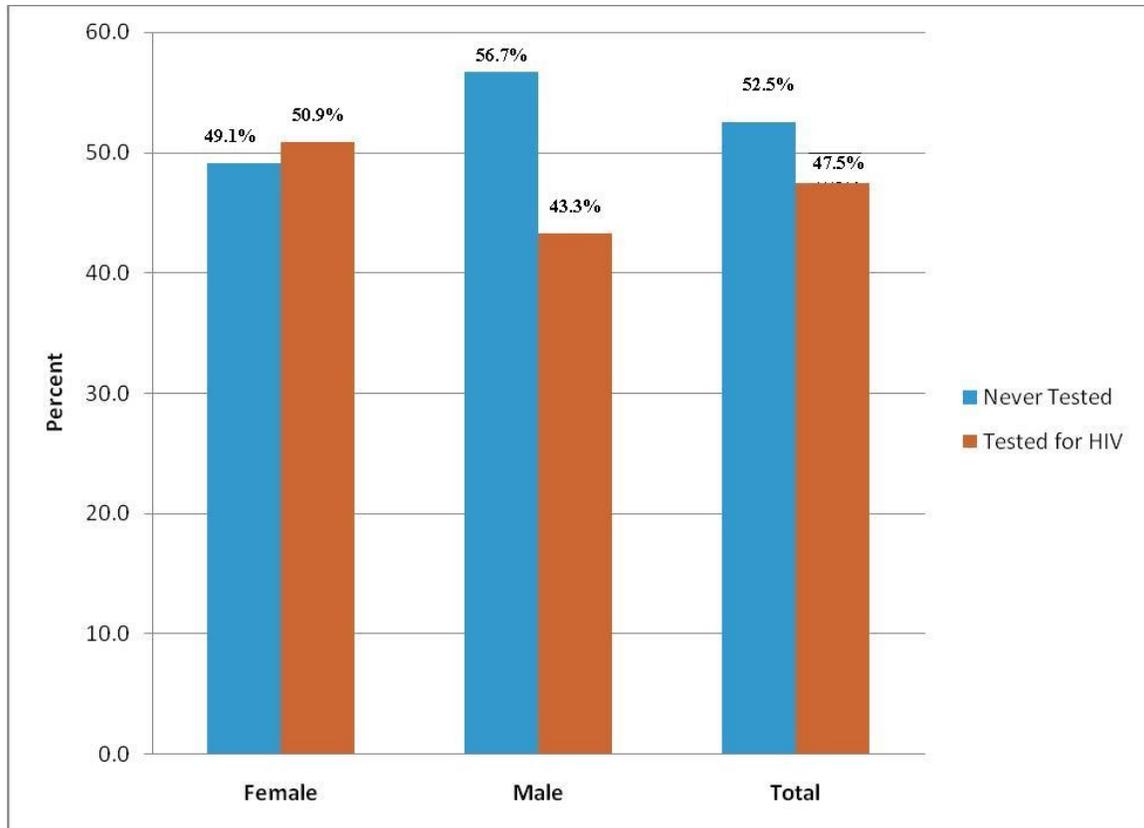
4.3.3 Knowledge about HIV status

Knowledge of HIV status helps those who are not infected with HIV to make informed and competent decisions about reducing the risk of contracting HIV. For those who test HIV positive, knowledge of their HIV status would help them to make decisions about avoiding further re-infection, protect their sexual partners, plan for the future, and access

care and treatment. To assess knowledge of HIV status, all respondents were asked if they had ever tested for HIV.

According to the findings presented in figure 3 below, about 47.5% of the respondents reported having tested for HIV before and 52.5% never tested for HIV. Knowledge of HIV status did not vary significantly by gender. A total of 50.9% of female participants reported having tested for HIV in the past, while 43.3% of male respondents reported the same. These results mirror the 2006-07 NDHS findings which reported that 51% of women in Namibia had been tested for HIV and received their results at some time. The 2004 – 2008, Namibia Household Survey (NHS) conducted in Gobabis, Grootfontein and Omaruru reported that males were less likely to have been tested for HIV than females, although this was likely to have been influenced by females being more likely to be tested in the context of pregnancy. Around a third to nearly half (38% - 49%) of females in the NHS reported that they were tested because of pregnancy (NawaLife Trust, 2008). As reflected on figure 3, only 43.3% of men reported having received HIV testing in the past. This trend is almost similar to the 2006-07 NDHS which reported that only 32% of men had received HIV testing and results in the past. Despite all the enumerated benefits of HIV testing, utilization of VCT by both men and women in the NDHS and in the study remains low.

Figure 3: Distribution of Knowledge of HIV status by Gender



4.3.4 Age distribution of participants ever tested

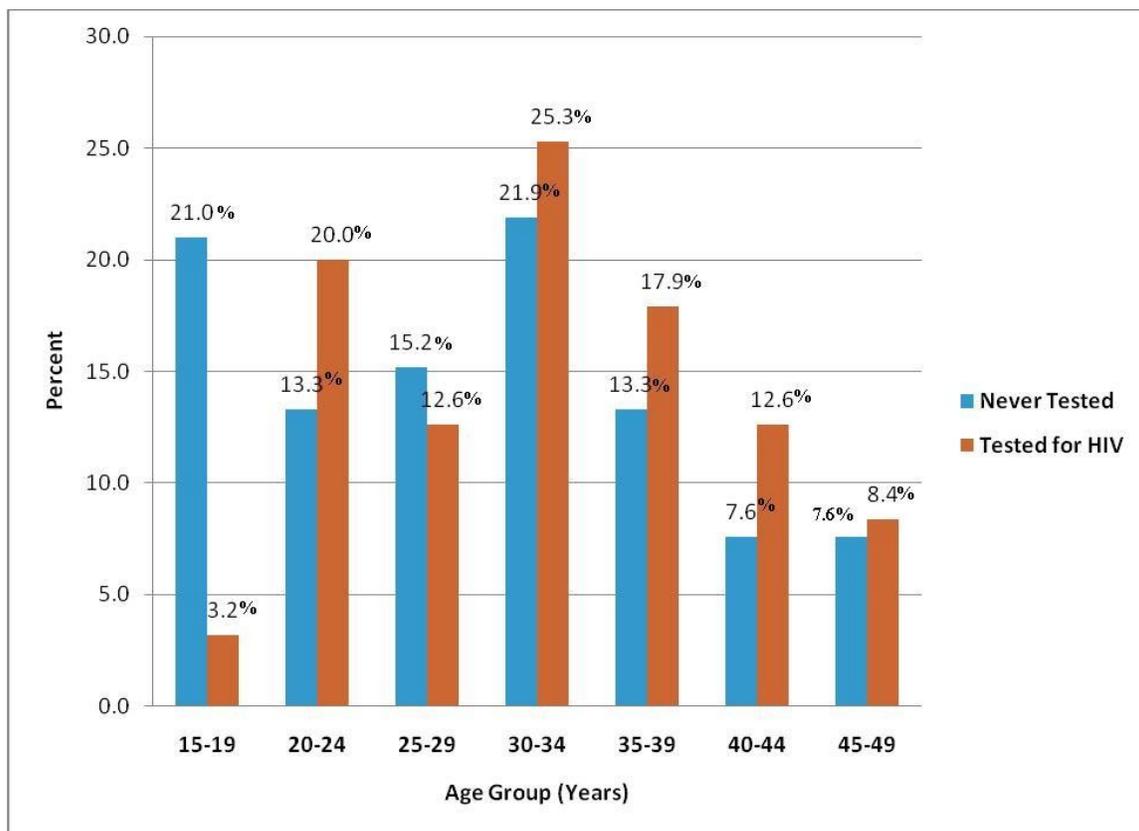
Figure 4 presents the distribution of knowledge of HIV status by age group. Knowledge of HIV status varied significantly by age group ($p < 0.05$) with those in the ages 30 years and above being more likely to report that they have been tested for HIV before compared to their younger counterparts. Of all the respondents who reported having gone for HIV testing in the past, only 3.2% were in the 15 to 19 year age group, 20% in the 20 to 24 category, 12.6% in the 25 to 29 category, 25.3% in the 30 to 34 category, 17.9% in the 35 to 39 age category, 13% in the 40 to 44 category, and 8% in the 45 to 49 year age group.

Anecdotally most youth get sexually active when they become teenagers. It is unfortunate to note that only 3.2% of respondents in the age category 15 to 19 knew their HIV status. This age group could be considered as the window of hope if they are carefully targeted to receive sound health education and encouraged to get tested and abstain from sexual activities. For those youths who will have started engaging in sex, it may be pertinent to ensure that they are targeted with messages on how to use protection. The findings may also mirror similar findings where the youth have been reported to have negative attitudes towards VCT services. It may be important to consider VCT services that are tailor-made specifically for the youth. Knowledge about HIV status may help empower the youth to protect themselves from getting infected, or if infected it would help them avoid further re-infection.

It is also important to note that during VCT counseling sessions, counselors and health care providers are trained to explain the window period to all clients and patients. If a client tests HIV negative, they encourage them to return for retesting in three months from the last time they had exposure to HIV risk. Of all the tested respondents, 45% reported having got the test within the previous six months and 39% within the previous year. Only 4% of these participants reported having tested within the previous 2 years and 12% reported having tested more than 2 years back. The trend mirrors the 2008 NHS findings which reported that of the respondents who had been tested for HIV, there was a high proportion of people who were tested within the past year, about three fifths in Omaruru (61%), Gobabis (60%) and 53% in Grootfontein (NawaLife Trust, 2008). Although the results seem to suggest that more participants were tested within the previous few months, there is no indication whether it was their first time to get tested for

HIV. The MoHSS guidelines for counselling and testing encourage people to get tested once a year if there is continued exposure to risk. People who regularly get tested without positively changing their behaviour are not encouraged to do so. HIV testing becomes significant if people take measures to engage in risk reduction activities after VCT.

Figure 4: Distribution of knowledge of HIV status by Age Group



4.3.5 Where Participants Got Tested for HIV

All respondents who reported having tested for HIV before were asked where they had got the test done. The majority (51.6%) reported having taken the test at public health facilities. Only 3.2% reported getting tested at mobile VCT facilities. HIV testing is only significant if the tested person receives their results. Participants were further asked if they received their results after HIV testing and 97% reported having received their HIV results. Mobile VCT services, that entail taking VCT services to the people for their convenience, are not very common in Namibia. This type of service delivery maybe expensive to run because the service providers would need well equipped vehicles to ferry service providers and equipment. Additionally, in the absence of a suitable room to provide services from, counseling and testing may be provided in the vehicles. It is only recently that the MoHSS introduced and provided guidelines for provision of mobile VCT services in Namibia. This might partly explain why a very small percentage (3.2%) of participants was tested at mobile VCT facilities.

As reflected in table below, 30% of the participants reported having taken their HIV testing at the New Start Centre branded VCT. Only 5% of the participants reported having taken their HIV testing at private clinics or doctors.

As highlighted above, the majority (51.6%) of study participants got tested at public clinics, health centers or hospitals. The findings may imply that there is confidence in the VCT services offered through the public health delivery model. VCT services in Namibia are being scaled up through existing health facilities to ensure that more people can easily access them. The results may suggest the need to continue scaling up services in public health facilities and to ensure that services provided are affordable, attractive,

confidential and easily accessible to more clients. Having user friendly, counseling and testing services available is likely to motivate more people to access VCT services. Evaluations of traditional VCT systems suggest low uptake of VCT services even in places where access is unlimited. As access to ARV treatment is increasing, there is need for alternative VCT delivery systems to increase access to and the utilization of VCT. These alternatives service deliveries may include mobile VCT, routine offer of counseling and testing at health facilities and home based VCT services. These delivery models may increase uptake of VCT services especially when they are combined with same day HIV tests results. While the above alternative approaches may increase access to utilization of VCT services, there is need to exercise caution because most of these approaches are fairly new and some have been implemented as part of ongoing research activities.

Table 6: Where participants got tested for HIV

Where respondents got the HIV test:	Percent (N=95)
• Mobile VCT	3.2
• New Start VCT centre	29.5
• Private clinic/doctor	5.3
• Private hospital	8.4
• Public hospital/Clinic	51.6
• Workplace	1.1
• Other	1.1
Total	100.0

4.4 Psycho-social Factors Affecting Utilization of VCT Services

As highlighted in the foregoing discussion, the utilization of VCT services globally and Namibia in particular is discouragingly low. A discussion of some of the pertinent psycho-social factors affecting uptake of VCT services is presented below.

4.4.1 Immediate Test Result availability (Rapid HIV Testing)

The Ministry of Health and Social Services in Namibia is aggressively scaling up availability of rapid HIV testing technology in public health facilities. Besides convenience, rapid HIV testing technology is as effective as the laboratory enzyme immunoassay technology and has the advantage that it does not need a laboratory. HIV test results can be available in a few minutes and the procedure can be performed by a trained lay person. A few public health facilities are still offering laboratory HIV testing for VCT clients, which at times make clients wait between two to three weeks before they receive their HIV results. Anecdotally, waiting for HIV results can be very stressful.

In an effort to determine whether the use of rapid HIV testing technology is likely to affect the utilization of VCT services, all the respondents who had taken an HIV test in the past were asked if receiving HIV results the same day was better than waiting for a longer period. In addition, participants were asked if more people were getting tested because of rapid HIV testing availability. Figure 5 presents distribution of availability of test results within the same day as reported by respondents who got tested for HIV in the past. As reflected in the graph below, 85.3% of the respondents who tested before reported that receiving HIV test results the same day was better than waiting for a longer

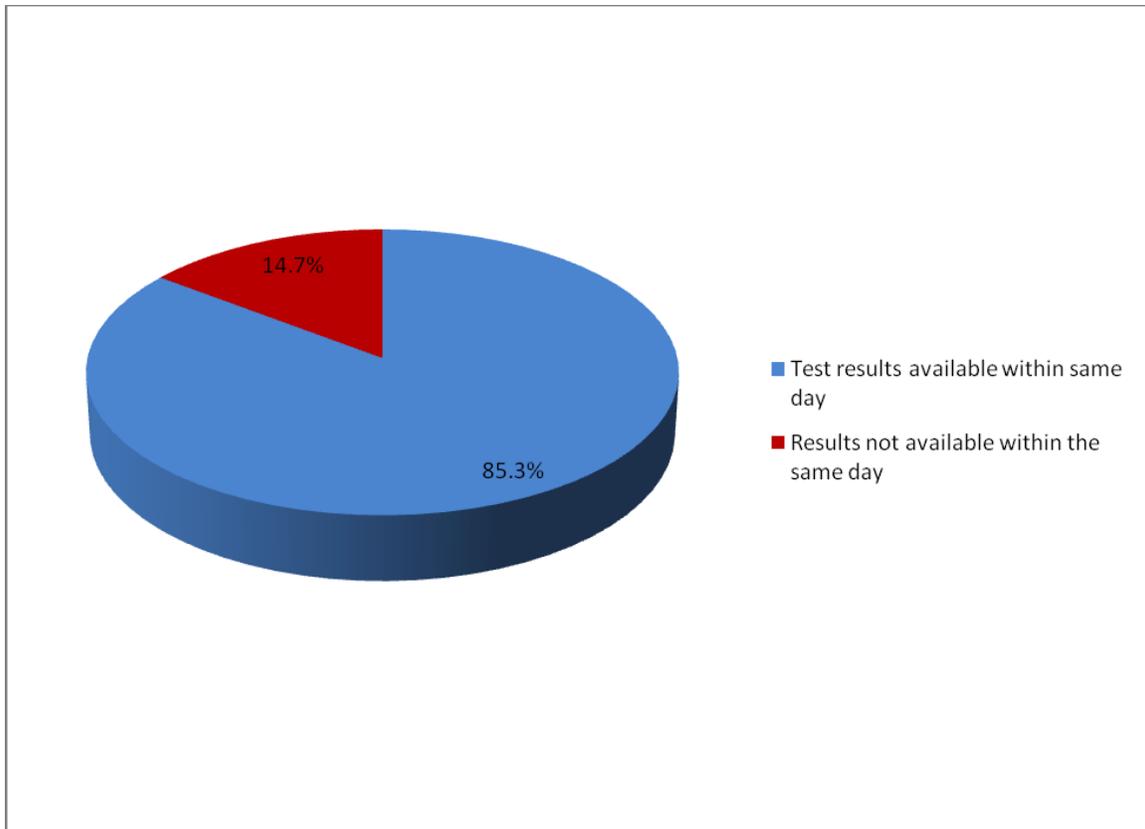
period. On the other hand, 51% of participants who never tested for HIV before reported that they would prefer to receive their HIV results the same day. The findings could imply that participants who have never tested for HIV in the past may have little knowledge and experiences about the merits of rapid HIV testing.

Additionally, 74% of the participants who had previously taken an HIV test expressed an opinion that more people were getting tested because of availability of rapid HIV testing. Contrary to the above, only 23% of the participants who never tested for HIV before reported that more people were getting tested because of rapid HIV testing availability. Salient to note is that the opinions of participants who have never tested for HIV are equally important because their perceptions may mirror the perceptions of other people in the community who have not had VCT experiences.

The preference by participants to receive results on the same day may suggest that rapid HIV testing is preferable and might be one way that can be used to improve collection of results by tested clients. However, the preference to get results on the same day was higher among those who had tested for HIV before. This might imply that the perceptions of people who have never tested for HIV is pertinent in understanding utilization of VCT services. If the majority of people who have never tested for HIV share the same conviction that people are hardly getting tested because of availability of rapid HIV testing, the demand for VCT may likely to remain low. People who have not been tested need to be reached with information related to rapid HIV testing in order to change their perceptions. Service providers need to disseminate information about the availability and benefits of the new rapid HIV testing technology. Such activities would help community

members who have not gone for HIV testing to take competent and informed decisions about HIV testing. Though preferring to get results on the same day is not synonymous or indicative of demand to get tested, the difference in opinion or perceptions between people who have tested for HIV before and those who have never tested provides salient baseline data and needs serious consideration in future. Availability of rapid HIV testing would not positively affect utilization of VCT if the majority of people who never tested are ill informed about the benefits of rapid HIV testing technology. Results show conflicting perceptions on whether more people are getting tested because of availability of rapid HIV testing. What came out clearly is that participants who tested for HIV in the past seemed to agree with the statement. Since there is evidence in other studies suggesting that the introduction of simple rapid HIV testing is likely to increase the uptake of VCT services, there may be need to work towards changing the perception of people who have never had exposure to rapid HIV testing.

Figure 5: HIV Test Results Availability within the same day



4.4.2 Affordability of VCT services

Respondents who got tested and received their results were asked if they paid for HIV testing. Only 21.1% reported that they had paid for their HIV testing, and reported having paid amounts ranging from N\$4.00 to N\$30.00. Of those who paid, the majority (30%) reported having paid N\$10.00. Also, when asked if they thought the services were affordable or not, 85% of all participants who had paid for their HIV test indicated that the services were affordable.

Participants who reported not paying for their HIV testing were asked how much they were willing to pay. 65% reported that they were not willing to pay anything to get tested while 21% reported that they were willing to pay N\$10.00 to get tested.

Amongst participants who had not gone for HIV testing, 81% indicated that they were not willing to pay for HIV testing. The results seem to mirror findings of a study of young couples in rural regions of western Kenya which suggest that cost factors can significantly affect uptake and acceptability of VCT services by young people. If counseling and testing was offered free of charge, 95.0% of the participants reported that they would accept the service. When the counseling and testing was offered at a cost of around US\$4, 00 between 31.0%-40.0% of the participants reported that they would take the test (Damesyn, Stiehm, Neumann, Morisky and Omwomo, 1998).

Since the majority (79%) of the tested participants reported that they did not pay for their HIV testing, this might imply that there are a lot of facilities offering free HIV testing in

Namibia. The majority of clients tested seem to have done so through public health facilities where they are expected to pay an administrative fee of N\$10.00 only, and in the event that they do not have money, the payment can be waived by facility management. Those who got tested at the New Start Centre VCT sites are not required to pay for HIV testing. As highlighted above, 81% of study participants who had not tested for HIV in the past reported that they were not willing to pay for HIV testing. This finding seems to suggest that, cost may be an important issue. This could either imply that these participants were aware that most of the facilities in Namibia offer free HIV testing or that they had no idea of the prices charged. With the current global economic crisis which is felt at the local level, making clients pay for HIV testing may potentially subdue demand. Since clients who have never tested for HIV before are potential VCT clients, their opinion on whether they are willing to pay for VCT is important. The fact that the majority of them reported that they're not willing to pay anything for VCT may imply that cost is an important factor. There is still need to study how significant cost is in relation to other factors. This would have very significant implications for planning of VCT services in Namibia and elsewhere.

Table 7: Affordability of VCT services among respondents who were tested

Respondent Paid For an HIV Test	Frequency	Percent
• No	75	78.9
• Yes	20	21.1
Total	95	100.0

4.4.3 Distance travelled by clients

Participants who had tested for HIV in the past were asked the estimated distance they travelled to go to the nearest VCT facility for HIV testing. The majority of participants (87.4%) indicated that they had travelled an estimated distance of between one to 10 kilometers. However, almost all respondents (96%) indicated that they were willing to travel less than 1km to get tested for HIV. For study participants who had not taken an HIV test before, 70% reported that they knew of a place where they could get tested if they wanted to do so. Only 31% had no clue where they could go for HIV testing. It should be noted that the study was carried out during a period when the cost of fuel was high and taxi fares were also high.

The findings seem to suggest that VCT services are widely available and the majority of people know where to go for HIV testing. In addition, the results could imply that cost is not only perceived in terms of service fees but also in terms of time and distance travelled by participants. Since study participants indicated that they are willing to travel less than one kilometer to get tested for HIV, a very good alternative is to take the VCT services to the people through outreach or mobile VCT activities. Outreach VCT implies that the VCT service providers conveniently take the services to the people. In this way clients do not incur transport costs. However, making VCT facilities or services within a one kilometer radius may not necessarily increase the utilization of VCT services. There is no evidence suggesting that this would work in isolation. The question that remains unanswered is that, would people get tested if VCT services are taken to their homes? Anecdotally, other countries like Zambia have started 'door to door' testing where

counselors move from house to house offering HIV counseling and testing. If transport cost was the main issue, then one would expect to see universal acceptance of VCT under such situations. They still experience clients declining to get tested for other reasons even when the services are taken to their houses. One area that the study did not explore was the opportunity cost of going for HIV testing. Opportunity cost is the cost not in money terms but in terms of the next best desired alternative activity forgone by going for HIV testing.

Table 8: Distance travelled by clients who tested

Distance Traveled to access services	Frequency	Percent
• 1-10km	83	87.4
• Less than 1km	9	9.5
• More than 10km	3	3.2
Total	95	100.0

4.4.4 Social Support

To determine whether perceived availability of social support was a pertinent factor in utilization of VCT services, participants were asked if their parents encouraged them to go for HIV testing. Overall, only 41% of all respondents reported that parents encouraged them to go for HIV testing. On further analysis, 39% of those respondents who had tested for HIV before indicated that their parents encouraged them to go for HIV testing compared to 43.3% of those who never tested. This difference was not statistically significant, suggesting that these two groups are equally likely to agree that parents discuss HIV/AIDS issues with their children and above all, encouraging them to go for HIV testing.

Closely linked to this, respondents were also asked if their parents would support them in the event that they test HIV positive. Overall, 80% of all the respondents agreed that their parents would support them. However, no significant differences were also observed between those who had been tested before compared to those never tested for HIV (85.4% and 76%, respectively). Thus, generally, there seem to be a very strong perception that parents would be the primary sources of support if one tests HIV positive but this support seem not to be important in creating demand for HIV testing.

Participants were also asked if their church pastor would support them if they tested HIV positive. Overall, 68% of all the respondents reported that their church pastor would support them if they were to test HIV positive. No significant variation was observed when comparison was made between those respondents who were tested and those not tested. Sixty nine percent (69.3%) of those respondents who had tested for HIV before agreed that their church pastor would support them if they were to test HIV positive while 67.3% of participants who never tested for HIV before responded the same. Thus, regardless of whether participants had tested for HIV before or not, there seems to be a perception that church pastors would provide support if a congregant tested HIV positive. A significant percentage of Namibians identify themselves as members of faith communities. Communities of faith play a very significant role in influencing people's behaviour and attitudes towards HIV/AIDS. However, these findings seem to suggest that even if those not tested may perceive their church pastors to support them if they were to test HIV positive, this would not drive them to get tested. Over and above all this, the findings also suggest that some religious leaders seem to be overtly or covertly showing

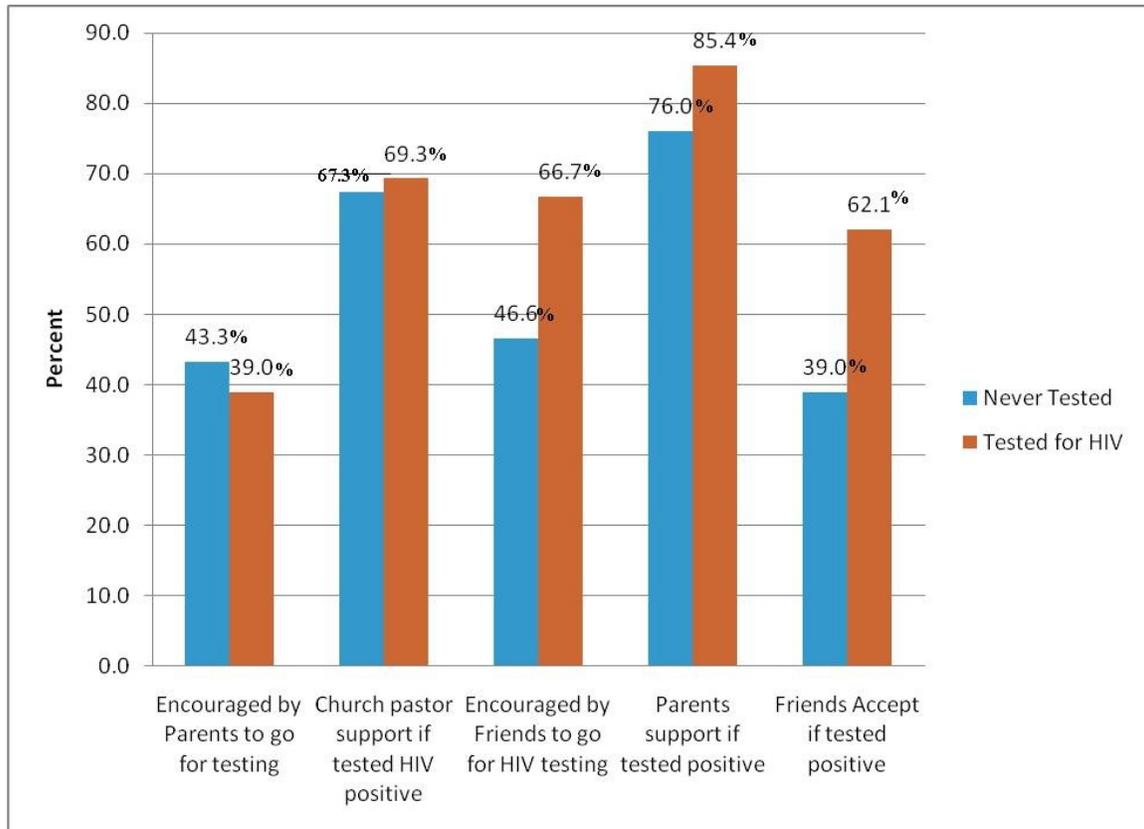
support to their church members who may be affected or infected with HIV/AIDS. Support or reassurance from a church pastor may evoke comforting emotions and feelings, offer strength, empowerment and control. It may also ease the emotional burden associated with testing HIV positive and provide a sense of belonging. Pastors can therefore play a very significant role by assuring and giving their congregants a sense of support without discrimination.

About 56% of all the respondents indicated that as friends they encouraged one another to go for HIV testing. Although the study could not establish a cause effect relationship, encouragement from friends was significantly associated with HIV testing behaviour ($p < 0.01$). Only 46.6% of respondents who never tested for HIV before reported that they encouraged one another to go for testing compared to 66.7% of tested respondents who reported the same. Overall, the findings suggest that those tested are more likely to report that they provide and get encouragement to go for HIV testing from their friends compared to those never tested. Discussing HIV/AIDS issues and encouraging each other to go for HIV testing may seem to be a more important factor driving people to get tested. Thus, efforts need to be put in place to stimulate discussions around HIV testing within friendships as this may have the potential to increase utilization of VCT services.

Additionally, the results from the study seem to suggest that those who had tested for HIV before were more likely to agree that their friends would accept them if they tested HIV positive than their never tested counterparts. Sixty two percent of tested respondents agreed to this as opposed to 39% of those never tested and this difference was significant ($p < 0.01$). The results imply that acceptance by friends is a significant factor which is likely to affect utilization of VCT. The perception that one would lose their friends in the

event that they test HIV positive may deter them from accessing VCT services. In order to address this issue, service providers may want to seriously consider creation of both print and electronic demand creation activities themed around friendship and HIV/AIDS support.

Figure 6: Distribution of respondents reporting Social Support by HIV testing status



4.4.5 Outcome Expectations

Respondents interviewed were segmented into two groups: those who knew their HIV status and those who did not. These two groups were then compared across a series of statements gauging their outcome expectations of getting tested for HIV. Responses were based on a 5 point scale where 1 was “strongly disagree” and 5 being “strongly agree.” After collapsing the categories to remain with 3 categories (Agree or Strongly Agree, Neither agree nor disagree and Disagree or strongly disagree). Figure 7 shows the

distribution of positive responses to the statements measuring outcome expectations by HIV testing status.

Overall, 34% of all the study respondents agreed or strongly agreed that testing HIV positive brings on AIDS and would accelerate death whereas 30% disagreed or strongly disagreed with the statement while 36% neither agreed nor disagreed. As reflected on figure 7 below, significant differences were observed when comparison was made between those respondents who were tested and those not tested, 41.8% of those respondents who had tested for HIV before agreed or strongly agreed that testing positive would accelerate death or immediately bring AIDS compared to 26.3% of participants who never tested for HIV before, ($p < 0.05$). The unexpected finding that those who had tested for HIV before were more likely to perceive more negative consequences of testing HIV positive than those not tested may warrant more exploration as it may be reflective of inadequate post test support to the HIV positive clients. Also, such negative and fatalistic perceptions may have the potential to ill influence the utilization of VCT services in the long run. The results may also suggest that intensive information needs to be disseminated to make people realize the importance of knowing their HIV status and to empower them to have hope that they can live longer with a known HIV positive status.

Participants were also asked if they agreed with the statement that getting tested would give them peace of mind and freedom from worries. A total of 62.4 % of those respondents who tested for HIV in the past either agreed or strongly agreed that getting tested would give them peace of mind compared to 26.3% of those who never tested for

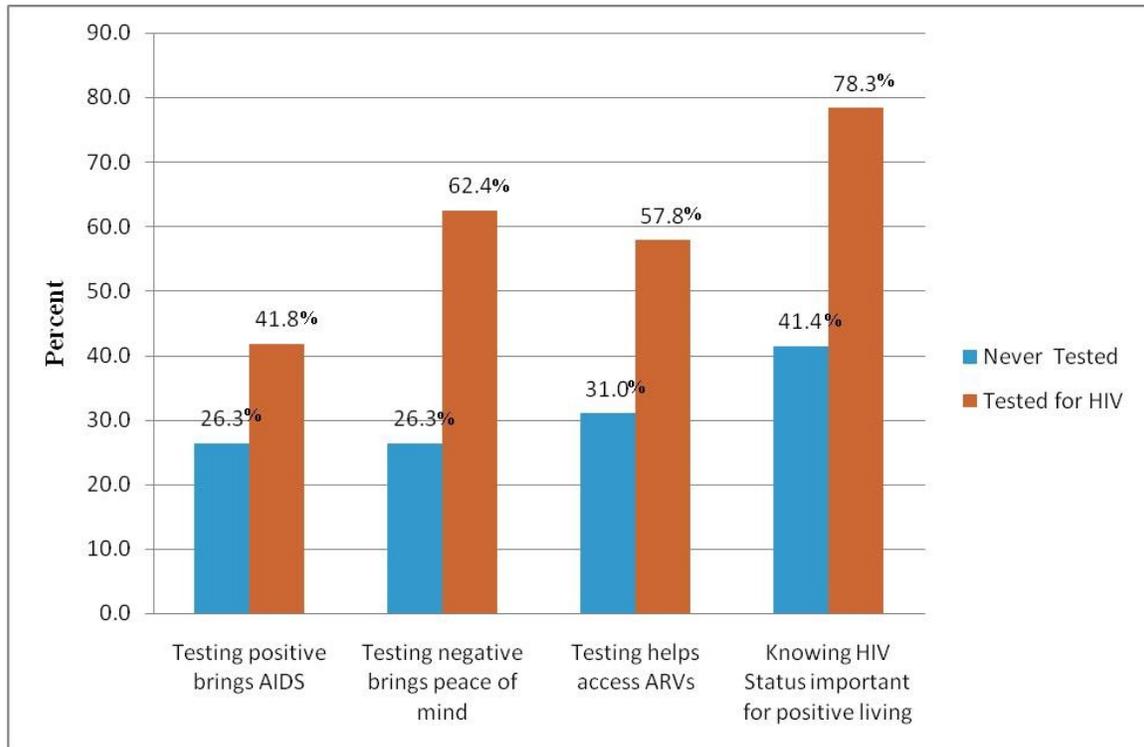
HIV in the past ($p < 0.001$). The deduction from the findings is that people who have never experienced counselling and testing may not see the services as positively as those who went through the experiences. Since the majority of people in Namibia and elsewhere have not tested for HIV, there may be need to find strategies of changing the perceptions of such people. Though people may not be driven to go for HIV testing solely because of hope of getting peace of mind, this may be a pertinent complementary factor for consideration.

In order to establish if ARV treatment was a strong outcome expectation for getting an HIV test, participants were asked whether they would want to get tested so as to access ARV therapy. Forty four percent of all the respondents reported that they agreed or strongly agreed with the statement that getting tested would help them gain access to ARVs. When participants were divided between the 'tested' and 'never tested' as reflected in figure 7 below, 57.8% of the tested respondents reported that they would want to get tested to access ARV therapy, compared to 31% of the 'never tested' respondents ($p < 0.001$). The findings seem to be very important as they show that participants who had not tested for HIV before did not link getting tested for HIV with accessing ARV therapy. In as much as such perception may potentially depress demand for VCT, the findings may also imply that participants may have had their own important reasons for getting tested than ARV therapy. A positive change in the perception of participants who never tested for HIV before may have the potential to create demand for HIV testing. ARV treatment is available in public health facilities in Namibia, there may

be need to find ways of ensuring that information about benefits and availability of ARV therapy is widely disseminated.

Amongst all the respondents, 59% either agreed or strongly agreed that knowing one's HIV status is important for positive living. On further analysis, it appeared that 78.3% of the tested respondents either agreed or strongly agreed that knowing one's HIV status is important for positive living, compared to 41.4% of the 'never tested' respondents ($p < 0.001$). The findings indicate that, unlike those who tested for HIV before, those who never tested for HIV perceive a weak link between testing and accessing ARV therapy. There could be a possibility that participants understood positive living to imply testing HIV positive. As such their responses could imply that in their personal capacities there was no link with ARV therapy if they perceived themselves to be at low risk of testing HIV positive. Positive living implies that if an individual tests HIV positive they can take necessary steps to protect themselves from further re-infection, infecting other people, they will eat healthy and even take necessary medication including ARVs. Again, there is need for further studies to establish the extent to which people would be driven to go for HIV testing so as to live positively.

Figure 7: Distribution of respondents with positive Outcome Expectations by HIV testing status



4.4.6 Availability of ART

Study participants were asked four questions to determine their opinions on whether people were getting tested because of ART availability. The aim of the question was to understand participants' perceptions about other people. A total of 65% of all the respondents agreed that more people were getting tested because of ART availability. Additionally, when all participants were divided into two groups of tested clients and clients who never tested, a total of 61.9% of respondents who never tested for HIV before agreed that more people were getting tested because of availability of ART compared to 67.4% of the tested respondents. This difference was not statistically significant. Overall,

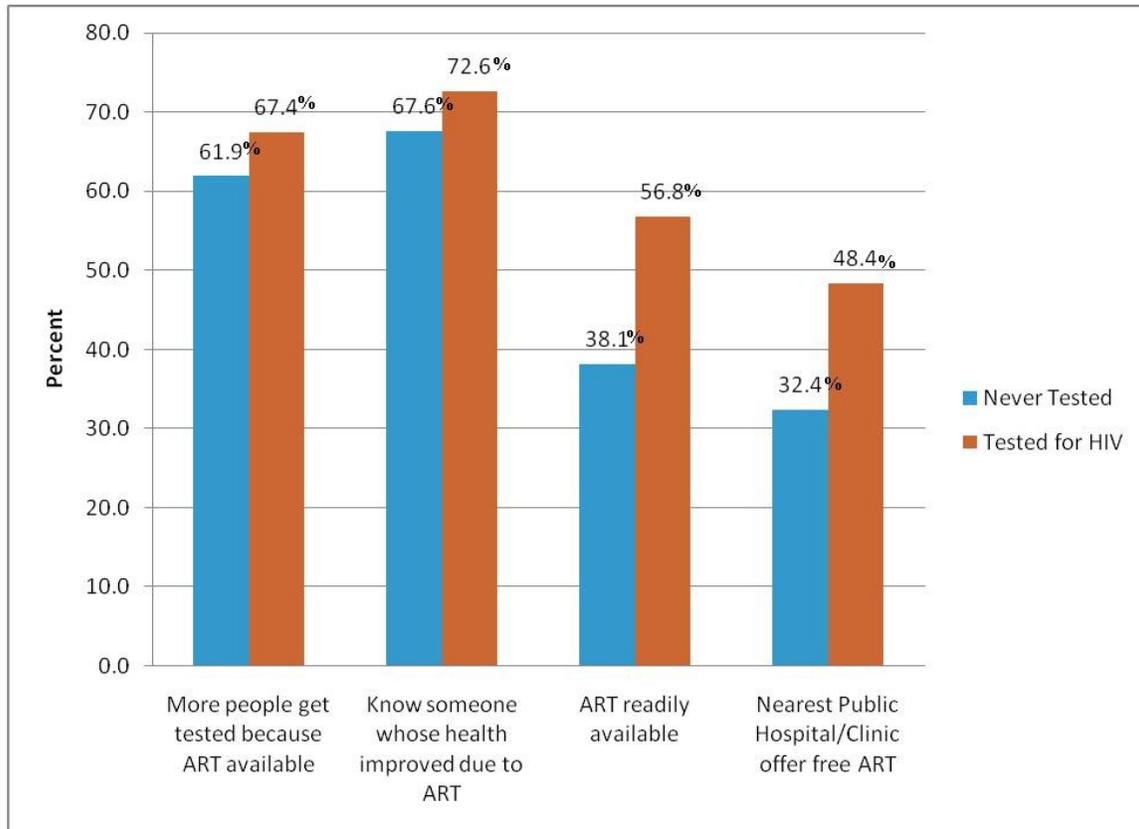
the findings imply that those tested and those never tested are equally likely to perceive that availability of ART may be an important factor in helping people to access HIV testing.

A total of 70% of all the respondents reported that they knew someone whose health had improved because of ART. However, a statistically insignificant difference was also observed when comparison was made between those respondents who were tested before and those who never tested for HIV before (72.6% and 67.6%, respectively). Though these findings may suggest that this factor is not very important in getting people to test for HIV, it is encouraging to note that the majority of respondents knew someone whose health improved because of ART. Anecdotally, people often believe what they see contrasted to what they hear.

Only 47% of all the study participants agreed with the statement that ARV therapy is readily available if one needs it. Notably, whereas 38.1% of respondents who never tested reported that ART is readily available, 56.8% of those tested reported the same and this difference was significant ($p < 0.01$). These findings seem to imply that those who never tested for HIV in the past are less likely to believe that ART can be readily accessible if needed. Such findings may imply the need for service providers to address such negative perceptions through different types of media campaigns. In addition, far less respondents who never tested for HIV before (32.4%) reported that public health facilities near where they stayed offer free ARVs, compared to 48.4% among those that tested for HIV before ($p < 0.05$).

As noted elsewhere, the ability to access treatment and plan for the future is one of the perceived benefits of testing for HIV. A similar positive association between ARV therapy provision and increased uptake of VCT was established in the Khayelitsha antiretroviral programme in South Africa (WHO, 2004). Since much of the meaning of people's lives is derived by way of an orientation towards the future, the terminal diagnosis accompanying an HIV positive status in the absence of ARV therapy fractures one's sense of purpose. This is likely to lead to psychological trauma and a pervading sense of hopelessness. Research with women who have had access to ARV therapy suggests that availability of ART decreases the hopelessness and helplessness attendant upon an HIV diagnosis and may result in an increased sense of personal responsibility for both treatment and prevention (Stein, 1996). The MoHSS and other VCT service providers may need to consider disseminating information about the availability of VCT services and how they are integrated with ART. In areas where ART services are not readily available there may be need to consider provision of combined outreach services for both VCT and ART for the convenience of people.

Fig 8: Distribution of respondents with positive perceptions about Availability of ART



4.4.7 Quality of VCT Services

In order to gauge the effect of quality of services on the utilization of VCT, study participants were asked to rate their responses on statements related to quality of services. It emerged that 57% of all the study participants reported that they either agreed or strongly agreed with the statement that ‘VCT staff members are very careful not to reveal private patient information’. As reflected on figure 8 below, significant differences were observed when a comparison was made between those respondents who were tested and

those who were not tested for HIV. Seventy percent of those respondents who had tested for HIV before agreed or strongly agreed to the statement compared to 45.5% of respondents who never tested for HIV before ($p < 0.001$). The difference was statistically significant. Participants who tested for HIV before may have based their responses on practical experiences. Responses of those who never tested could have been based on what they could have heard through different sources. Regardless of the credibility of the sources of information, the findings suggest that such perception may have the potential of affecting the demand for VCT. There is need for more people who have never tested for HIV before regard to regard VCT service providers as professionals who do not reveal client information without their consent. In order to address this challenge, a two thronged approach may be needed. The service providers may need training on how to observe and respect clients' privacy, and on the other hand there may be need to focus on positively altering the perceptions of potential clients.

Participants were also asked to rate their responses on whether HIV results were kept confidential. Fifty three percent of all the participants either agreed or strongly agreed with the statement. Fourty percent of respondents who never tested agreed or strongly agreed with the statement compared to 67.7% (N=93) of tested respondents ($p < 0.001$).

The results seem to suggest that some of the VCT service providers were perceived as careful in the way they handle private client information. As highlighted elsewhere in the preceding literature, lack of confidentiality was reported as a key barrier preventing clients from utilizing VCT. The findings may suggest that the participants' perceptions about breaching of confidentiality and privacy during HIV testing were positive amongst respondents who had not tested. This may imply that policies and guidelines put in place

by the Namibia Ministry of Health and Social Services around confidentiality and privacy are well adhered to, however the perception of potential clients towards confidentiality may need to be changed in order for them to consider getting tested for HIV. Changing the perception of those who do not know their HIV status remains a challenge. Though some people may not place high concerns on confidentiality and privacy, these could be very important complementary factors for service providers to consider during planning of VCT services.

On whether VCT counselors were gentle and supportive during their conduct, 44.4% of respondents who never tested for HIV agreed with the statement compared to 69.6% of the tested respondents ($p < 0.01$). Participants were also asked if nurses were gentle and supportive when dealing with VCT clients, 37.6% and 56.4% of respondents who never tested and those who tested for HIV, respectively, reported that nurses were gentle and supportive ($p < 0.05$). Anecdotally, a gentle and supportive service provider, particularly in HIV/AIDS counseling may make the tension and stress associated with HIV positive results manageable. Studies conducted in Malawi revealed that young people require services that are provided by health care workers who are friendly and whom they trust to keep confidential any information they get from young people (National Youth Council of Malawi, 2000). Client exit interviews conducted at an AIDS information center in Uganda revealed that as many as 90.0% of young people interviewed preferred friendly health care providers, 74% liked professionalism in health care providers, 87% appreciated a warm reception on arrival while 30% liked confidentiality of results (Horizons, 2004). Again this seems to be an important extrinsic complementary factor which needs to be addressed. If more potential clients perceive VCT counselors and

nurses as gentle, this may help them to consider VCT and also help them in choosing service providers who meet their expected standard of care.

According to the findings, respondents generally rated Nurses as less gentle and supportive compared to counselors. Though not conclusive, this could imply that counseling is not a core activity for nurses whereas most counselors like Social Workers are intensively trained on how to relate with clients and deal with sensitive issues. There may be need for service providers and planners to consider involving more Social Work counselors in HIV counseling and testing as this may help improve the perception of potential VCT clients.

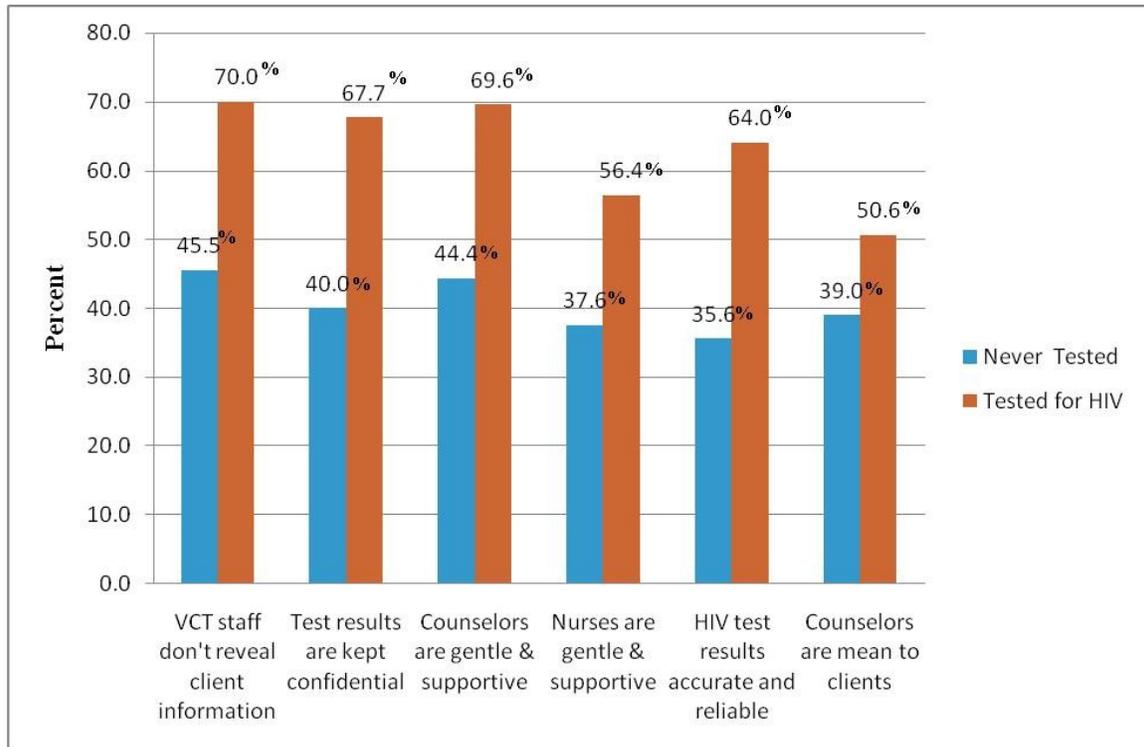
On the accuracy of HIV test results, forty nine percent of all the respondents either agreed or strongly agreed with the statement that HIV test results are accurate and reliable. Only 18% either disagreed or strongly disagreed with the statement and the remaining 33% were not sure. Amongst participants who never tested for HIV, 35.6% agreed that HIV test results are accurate and reliable while 64% of respondents who knew their HIV status agreed or strongly agreed to the same statement ($p < 0.001$). The difference between the two groups is statistically significant. These findings seem to suggest that those who never tested for HIV are more likely to have doubts about the accuracy and reliability of HIV testing results relative to those who have been tested. HIV test results are very sensitive, anecdotally some people dread going for HIV testing for fear of receiving wrong results. If people do not have confidence with the HIV results issued at testing facilities, the demand for testing may be depressed. There may be need

for service providers to find ways of addressing the issue of accuracy and reliability of HIV results.

Participants were also asked to rate on whether counselors are mean to patients or not. Only 44% of all the respondents either agreed or strongly agreed with the statement that counselors are mean and sometimes yell at patients. Thirty nine percent of respondents who never tested for HIV agreed or strongly agreed with the statement compared to 50.6% of tested respondents who reported the same ($p < 0.05$). The findings suggest that those who never tested for HIV before are more likely not to perceive counselors as mean to clients in comparison to those who have been tested. This may imply that this factor has the potential to negatively affect demand for VCT. There may however be other significant factors that may deter people from going for HIV testing other than counselors who are mean. On the other hand, those who have gone through HIV testing may have based their responses on their lived experiences when they went for HIV testing.

Overall, quality of VCT services seems to be an important factor for consideration when designing VCT services.

Figure 9: Distribution of respondents with positive perceptions about Quality of VCT Services by HIV testing status



CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The main purpose of the study was to explore and collect baseline data on psycho-social factors influencing utilization of VCT services amongst the 15 to 49 year old people in Windhoek. The conclusions based on the research results discussed in the preceding chapter will be used to answer the research questions which were formulated in chapter one as follows:

- Does perceived availability of social support affect use of VCT?
- Do outcome expectations affect utilization of VCT?
- Does new rapid HIV testing technology's ability to supply immediate results affect the utilization of VCT services?
- Does availability of antiretroviral (ARV) therapy affect the utilization of VCT services?
- Does quality of services provided affect utilization of VCT?
- Is cost a pertinent factor affecting utilization of VCT services?

5.1.1 Conclusions in relation to the objectives of the study

The objectives of the study were evaluated to determine whether they were realized. All the objectives will be discussed and conclusions will be drawn in relation to each objective.

- **Availability of social support and how it affects utilization of VCT services.**

The results seem to suggest that perceived availability of social support affects utilization of VCT in different ways. Overall, only 41% of all respondents reported that parents encouraged them to go for HIV testing. On further analysis, 39% of those respondents who tested for HIV before indicated that their parents encouraged them to go for HIV testing compared to 43.3% of those who never tested. This difference was not statistically significant, suggesting that these two groups are equally likely to agree that parents discuss HIV/AIDS issues with their children and above all, encouraging them to go for HIV testing. The findings therefore imply that encouragement to go for VCT by parents is unlikely to influence VCT utilization.

Closely linked to this, respondents were also asked if their parents would support them in the event that they tested HIV positive. Overall, 80% of all the respondents agreed that their parents would support them. However, no significant differences were also observed between those who had been tested before compared to those who never tested for HIV (85.4% and 76%, respectively). Thus, generally, there seems to be a strong perception that parents would be the primary sources of support if one tests HIV positive but this support seem not to be important in creating demand for HIV testing.

Participants were also asked if their church pastor would support them if they tested HIV positive. Overall, the majority of respondents reported that their church pastor would support them if they were to test HIV positive. No significant variation was observed when comparison was made between those respondents who were tested and those not tested. Sixty nine percent (69.3%) of those respondents who had tested for HIV before agreed that their church pastor would support them if they were to test HIV positive

while 67% of participants who never tested for HIV before responded the same. Thus, regardless of whether participants had tested for HIV before or not, there seems to be a perception that church pastors would provide support if a congregant tested HIV positive. As highlighted elsewhere in this report, a significant percentage of Namibians identify themselves as members of faith communities. Communities of faith play a very significant role in influencing people's behaviour and attitudes towards HIV/AIDS. However, these findings seem to suggest that even if those who never tested may perceive their church pastors to be supportive if they were to test HIV positive, this would not drive them to get tested. Over and above all this, the findings also suggest that some religious leaders seem to be overtly or covertly showing support to their church members who may be affected or infected with HIV/AIDS. As noted elsewhere in this document, support or reassurance from a church pastor may evoke comforting emotions and feelings, offer strength, empowerment and control. It may also ease the emotional burden associated with testing HIV positive and provide a sense of belonging. Pastors can therefore play a very significant role by assuring and giving their congregants a sense of support without discrimination.

Fifty six percent of all the respondents indicated that as friends they encouraged one another to go for HIV testing. Although the study could not establish a cause effect relationship, encouragement from friends was significantly associated with HIV testing behaviour ($p < 0.01$). Only 46.6% of respondents who never tested for HIV before reported that they encouraged one another to go for testing compared to 66.7% of tested respondents who reported the same. Overall, the findings suggest that those tested are more likely to report that they provide and get encouragement to go for HIV testing from

their friends compared to those never tested. Discussing HIV/AIDS issues and encouraging each other to go for HIV testing may seem to be a more important factor driving people to get tested.

Also, the results from the study suggest that those who had tested for HIV before were more likely to agree that their friends would accept them if they tested HIV positive than their never tested counterparts. 62% of tested respondents agreed to this as opposed to 39% of those never tested and this difference was significant ($p < 0.01$), implying that it can have an influence on the utilization of VCT services.

Based on the findings, it can be concluded that two factors related to social support seem to be significant in affecting utilization of VCT. Encouragement amongst friends to go for HIV testing seems to be an important factor which can affect utilization of VCT services. Additionally, the perception that one would get support from friends if they test HIV positive is another significant factor related to social support.

- **Outcome expectation and its effect on utilization of VCT services**

Below is a summary of baseline data obtained in relation to the above objective.

Of all the participants who took part in the study, 34% agreed or strongly agreed that testing HIV positive brings on AIDS and would accelerate death whereas 30% disagreed or strongly disagreed with the statement while 36% neither agreed nor disagreed. Significant differences were observed when a comparison was made between those respondents who were tested and those not tested, 41.8% of those respondents who had tested for HIV before agreed or strongly agreed that testing positive would accelerate death or immediately bring AIDS compared to 26.3% of participants who never tested for

HIV before, ($p < 0.05$). As highlighted before, the unexpected finding that those who had tested for HIV before were more likely to perceive more negative consequences of testing HIV positive than those not tested may warrant more exploration as it may be reflective of inadequate post test counselling and support to the HIV positive clients. Also, such negative and fatalistic perceptions may have the potential to ill influence the utilization of VCT services in the long run. The results may also suggest that intensive information needs to be disseminated to make people realize the importance of knowing their HIV status and to empower them to have hope that they can live longer with a known HIV positive status.

More respondents (62.4) who tested for HIV in the past either agreed or strongly agreed that getting tested would give them peace of mind compared to those who never tested (26.3) for HIV in the past ($p < 0.001$). The deduction from the findings is that people who have never experienced counselling and testing may not see the services as positively as those who went through the experiences. Designing demand creation strategies around this factor 'peace of mind' may be worthwhile. Though people may not be driven to go for HIV testing solely because of hope of getting peace of mind, this may be a pertinent complementary factor for consideration.

A total of 57.8% of the tested respondents reported that they would want to get tested to access ARV therapy, compared to 31% of the 'never tested' respondents ($p < 0.001$). The findings seem to be very important as they show that participants who had not tested for HIV before did not link getting tested for HIV with accessing ARV therapy. In as much as such perception may potentially depress demand for VCT, the findings may also imply that participants may have had their own important reasons for getting tested than ARV

therapy. A positive change in the perception of participants who never tested for HIV before may have the potential to create demand for HIV testing. ARV treatment is available in public health facilities in Namibia, there may be need to find ways of ensuring that information about benefits and availability of ARV therapy is widely disseminated.

Amongst all the respondents, a total of 59% either agreed or strongly agreed that knowing one's HIV status is important for positive living. Seventy eight percent of the tested respondents reported either agreed or strongly agreed that knowing one's HIV status is important for positive living, compared to 41% of the 'never tested' respondents ($p < 0.001$). The findings indicate that, unlike those who tested for HIV before, those who never tested for HIV perceive a weak link between testing and accessing ARV therapy. There could be a possibility that participants understood positive living to imply testing HIV positive. As such their responses could imply that in their personal capacities there was no link with ARV therapy if they perceived themselves to be at low risk of testing HIV positive.

Factors related to outcome expectation appeared to be important in determining utilization of VCT services. There was a significant difference between the perceptions shared by tested participants compared to those who had never tested for HIV in the past. Participants who had never tested did not strongly associate testing for HIV with 'peace of mind', neither did they associate HIV testing with accessing ARVs. Additionally, there was no strong association between knowing one's HIV status with positive living amongst participants who had not tested for HIV. Therefore, in order to get more people

tested for HIV, demand creation strategies may need to be focused around the foregoing thematic areas.

- **Effect of rapid HIV testing technology on the uptake of VCT**

Eighty five percent of the respondents who tested before reported that receiving HIV test results the same day was better than waiting for a longer period. On the other hand, 51% of participants who never tested for HIV before reported that they would prefer to receive their HIV results the same day. The findings could imply that participants who have never tested for HIV in the past may have negative perceptions or little experiences about the merits of rapid HIV testing. Additionally, 74% of the participants who had previously taken an HIV test indicated that more people were getting tested because of availability of rapid HIV testing. Contrary to the above, only 23% of the participants who never tested for HIV before reported that more people were getting tested because of rapid HIV testing availability. Salient to note is that the opinions of participants who have never tested for HIV are very important because their perceptions may mirror the perceptions of other people in the community who have not had VCT experiences.

The preference by participants to receive results on the same day may suggest that rapid HIV testing is preferable and might be one way that can be used to improve collection of results by tested clients. However, the preference to get results on the same day was higher among those who had tested for HIV before. This might imply that the perceptions of people who have never tested for HIV is pertinent in understanding utilization of VCT services. If the majority of people who have never tested for HIV share the same

conviction that people are hardly getting tested because of availability of rapid HIV testing, the demand for VCT may likely to remain low. Service providers need to disseminate information about the availability and benefits of the new rapid HIV testing technology. Such activities would help community members who have not gone for HIV testing to take competent and informed decisions about HIV testing. Conclusively, the perception that more people are getting tested because of rapid HIV test availability was high amongst people who had tested for HIV before. Participants who had not tested for HIV before did not seem to have the same perception. This could imply that, in order for more people to get tested for HIV there may be need to further explore the VCT related perceptions of people who have never tested for HIV. Such an understanding can help inform the VCT service providers in addressing the issue of low utilization of VCT.

- **Effect of antiretroviral (ARV) therapy on the uptake of VCT services**

Sixty five percent of all the respondents agreed that more people were getting tested because of ART availability. Additionally, when all participants were divided into two groups of tested clients and clients who never tested, 61.9% of respondents who never tested for HIV before agreed that more people were getting tested because of availability of ART compared to 67.4% of the tested respondents. This difference was not statistically significant. Overall, the findings imply that those tested and those never tested are equally likely to perceive that availability of ART may be an important factor in helping people to access HIV testing.

Seventy percent of all the respondents reported that they knew someone whose health had improved because of ART. However, a statistically insignificant difference was also

observed when a comparison was made between those respondents who were tested before and those who were not tested (72.6% and 67.6%, respectively). Although these findings may suggest that this factor is not very significant in getting people tested for HIV, it is encouraging to note that the majority of respondents knew someone whose health improved because of ART.

Only 47% of all the participants agreed with the statement that ARV therapy is readily available if needed. Notably, whereas 38.1% of respondents who never tested reported that ART is readily available, 56.8% of those tested reported the same and this difference was significant ($p < 0.01$). These findings seem to imply that those who never tested are less likely to believe that ART is readily available if needed compared to those tested. In addition, far less respondents who never tested for HIV before (32.4%) reported that public health facilities near where they stayed offer free ARVs, compared to 48.4% among those that tested for HIV before ($p < 0.05$).

Therefore, two factors related to availability of ART seem to have the potential to significantly affect utilization of VCT. Readily availability of ART services coupled with having close public health facilities offering ART. There may be need to further understand the extent to which ART is not readily available in Windhoek. In order to create demand for VCT services people who have never tested for HIV may need reassurance that if they test HIV positive there is a good chance for them to immediately benefit from ART. There is also need to ensure that ART services are within reasonable distances for people to travel.

- **The effect of costs on the utilization of VCT services**

The study findings indicate that VCT services are affordable, 85% of the participants who had paid for HIV testing indicated that the services were affordable. Though, the services seemed affordable, the study findings seem to suggest that people would prefer free VCT services. This is evidenced by participants who went for HIV testing but did not pay, 65.3% reported that they were not willing to pay for HIV testing. Amongst participants who had never gone for HIV testing, 81% indicated that they were not willing to pay for HIV testing. Cost may be an issue because participants indicated that they were not willing to pay for HIV testing. On one hand, this could also imply that participants were aware that most of the facilities in Namibia offer free HIV testing. In planning provision of VCT services there may be need to ensure that costs of services do not scare away potential clients. Cost in terms of the distance travelled by clients should always be taken into consideration.

- **The effect of quality of services on the uptake of VCT.**

The majority (57%) of all the study participants reported that they either agreed or strongly agreed with the statement that 'VCT staff members are very careful not to reveal private patient information'. Significant differences were however observed when a comparison was made between those respondents who were tested and those not tested. 70% of those respondents who had tested for HIV before agreed or strongly agreed to the statement compared to 46% of respondents who never tested for HIV before ($p < 0.001$).

Participants who tested for HIV before may have based their responses on practical experiences. Responses of those who never tested could have been based on what they have heard through different sources. Regardless of the credibility of the sources of information, the findings suggest that such perceptions from people who did not know their HIV status may have the potential to affect demand for VCT.

Participants were also asked to rate their responses on whether HIV results were kept confidential. Of all the participants, fifty three percent either agreed or strongly agreed with the statement. Forty percent of respondents who never tested agreed or strongly agreed with the statement compared to 67.7% of tested respondents ($p < 0.001$). The results seem to suggest that some of the VCT service providers were perceived as careful in the way they handle private client information. The results suggest that this is can be an important factor in affecting utilization of VCT. There is however need for further studies to gain insight on how significant this factor is. The findings also suggest that the participants' perceptions about breaching of confidentiality and privacy during HIV testing were positive amongst tested participants. The findings imply that though changing the perception of those who do not know their HIV status remains a challenge, it may be worthwhile to address this factor.

On whether VCT counselors were gentle and supportive during their conduct, 44.4% of respondents who never tested for HIV agreed with the statement compared to 69.6% of the tested respondents ($p < 0.01$). Participants were also asked if nurses were gentle and supportive when dealing with VCT clients, 37.6% and 56.4% of respondents who never tested and those who tested for HIV, respectively, reported that nurses were gentle and supportive ($p < 0.05$). Anecdotally, a gentle and supportive service provider, particularly in

HIV/AIDS counseling may make the tension and stress associated with HIV positive results manageable. Again this seems to be an important extrinsic complementary factor which needs to be addressed. If more potential clients perceive VCT counselors and nurses as gentle, this may help them to consider VCT and also help them in choosing service providers who meet their expected standard of care.

On the accuracy of HIV test results, forty nine percent of all the respondents either agreed or strongly agreed with the statement that HIV test results are accurate and reliable. Only 18% either disagreed or strongly disagreed with the statement and the remaining 33% were not sure. Amongst participants who never tested for HIV, 35.6% agreed that HIV test results are accurate and reliable while 64% of respondents who knew their HIV status agreed or strongly agreed to the same ($p < 0.001$). These findings seem to suggest that those who never tested for HIV are more likely to have doubts about the accuracy and reliability of HIV testing results relative to those who have been tested and this can negatively affect utilization of VCT services. Participants were also asked to rate on whether counselors are mean to patients or not. Only 44% of the respondents either agreed or strongly agreed with the statement that counselors are mean and sometimes yell at patients. Thirty nine percent of respondents who never tested for HIV agreed or strongly agreed with the statement compared to 50.6% of tested respondents who reported the same ($p < 0.05$). The findings suggest that those who never tested for HIV before are more likely not to perceive counselors as mean to clients in comparison to those who have been tested. This may imply that this factor may not negatively affect demand for VCT since those who never tested did not strongly perceive as mean to

clients. Overall, quality of VCT services appeared to be an important factor affecting utilization of VCT services.

In conclusion, the findings suggest that rapid HIV testing is preferable which ensure availability of HIV testing results immediately is preferable. Parents as well as church pastors were perceived as very supportive to individuals going for HIV testing. However, tested individuals were equally likely as those not tested to agree that the church pastors and parents would provide them with support if they tested HIV positive. Though this support from church pastors and parents was found not to be important in getting people who have never tested to get tested, the findings indicate that the support that individuals get from their friends with regards to going for HIV testing as well as individuals' perceptions about their friend's acceptance of an HIV positive result was critical in HIV testing demand creation.

Outcome expectation was also identified to be an important factor distinguishing those who have been tested for HIV from those not tested. More importantly, those who tested were more likely to report that knowing one's HIV status brings peace of mind, helps access ARVs and is important for positive living as compared to their never tested counterparts. Thus, demand creation strategies for HIV testing may need to emphasize on these key benefits of getting tested.

Availability of ART was identified as a critical factor in creating demand for HIV testing. The findings show that those individuals who never tested for HIV are less likely to believe that ART is readily available if one needs it compared to those who knew their HIV status. Also, far less respondents who never tested for HIV

agreed that public health facilities near where they stayed offered free ARVs, compared to those who had tested for HIV before.

Perceptions on the VCT quality of services were also identified as important in driving people to get tested. Tested respondents were more likely to have more positive perceptions about the quality of services compared to those who had never tested. For instance, tested respondents were more likely to agree that VCT staff members are very careful not to reveal private patient information, and that HIV results are kept confidential. In order to increase utilization of VCT services, there may be need to work on service related issues pertaining to confidentiality of results as well as well as training counsellors to be more gentle and supportive to clients.

5.2 Conclusions in the context of the Health Belief Model

Based on research results that were analyzed in chapter four, several conclusions have been made in this study. These findings have been contextualized within the HBM tenets. Below is a discussion of the study findings within the context of the HBM tenets.

5.2.1 Perceived Susceptibility:

The findings from the study reveal that the majority of participants had not tested for HIV in the past. This implies that a few participants (those who tested in the past) perceived themselves to be at risk of getting HIV. The findings seem to follow the same pattern with results from other national surveys like the NDHS. It should however be noted that females seem to perceive themselves as being at risk of getting HIV as evidenced by the study findings where the majority of women seem to have been tested for HIV in the

past. According to the study findings 47.5% of the participants ever tested for HIV before and 52.5% never tested for HIV. Of those who reported having tested for HIV in the past, there were more women 50.9% than men 43.3%. Pertinent to note is that these findings seem to follow the same trend with the 2006-07 NDHS findings which reported that 51% of women in Namibia had been tested for HIV and received their results at some time. Another finding from available research has shown that there is denial of risk that exists amongst some segments of the population in Namibia (SIAPAC, 2005). According to the report, young men, in particular do not perceive themselves to be at risk of acquiring HIV. Despite high risk behaviour involving multiple concurrent partners and inconsistent condom use the majority of men in high prevalence communities did not believe that they were personally at risk of contracting HIV virus (SIAPAC, 2005). Among women there were more realistic perceptions of risk, though some thought that there was little risk of them becoming infected. Studies done in Namibia have also shown that, for some people acquiring HIV is a concern, but may not be the primary concern. For some populations living on under a dollar a day, subsistence is a daily struggle in an environment with no job or food security. Livelihood, hunger and unemployment are more immediate concerns than an illness that will be felt in years to come (LeBeau and Mufume, 2001).

5.2.2 Perceived severity:

The results showed that in as much as some participants seem to have a sense of the severity of their risk some did not seem to have the same perception. With only 47.5% of the participants having been tested in the past, this could imply that the perceived severity

of risk was low amongst participants. As noted elsewhere, people may not go for HIV testing if their perception of testing HIV positive does not imply that they would eventually get AIDS and waste away. They may engage in positive behaviour change if they have concerns that they could be at risk of HIV infection and if infected with HIV they may get AIDS.

5.2.3 Perceived benefits:

Study results showed that participants' knowledge about HIV/AIDS was high. Participants were knowledgeable about the availability of ARV treatment. Fifty eight percent of the participants indicated that they knew of a treatment that could prolong life of a person living with HIV/AIDS. Of the 58% study participants who reported knowledge about treatment, all of them were able to cite ARV as the treatment. The majority of participants reported that their church pastor would support them if they were to test HIV positive. Additionally of all the participants reported that their parents would support them if they were to test HIV positive. Some of the perceived benefits of getting tested for HIV highlighted in the study include, access to ART, getting peace of mind and living positively. Beside these perceived benefits, the number of participants who knew their HIV status (47.5%) was not very high. Results may imply that, besides all the enumerated benefits of getting tested there are some people who need to change their perception regarding HIV testing. It is this belief that gives people confidence to take the action because of the perceived expected outcomes.

5.2.4 Perceived barriers:

Some of the perceived barriers identified in the study include cost of VCT services. All participants who had not paid for their HIV testing were asked how much they were willing to pay and the majority reported that they were not willing to pay anything. Though VCT services seemed affordable, participants reported that they were not willing to pay for the services. Another identified perceived barrier was distance traveled by participants to get tested. Almost all participants who had tested for HIV in the past indicated that they were willing to travel less than one kilometer to get tested for HIV. Other perceived barriers identified in the study include, rejection from friends if one tests HIV positive, ARV therapy perceived as not readily available, It is only when people realize that they have the capacity to deal with these barriers that they would be able to take the necessary action.

5.2.5 Cues to action:

The results seem to imply that making VCT services free or affordable may motivate people to seek VCT services. Additionally making VCT services readily available to people instead of people walking long distances to seek services would also motivate more people to access the services. This can be made possible through provision of outreach/mobile VCT services to areas where VCT facilities are not easily accessible by people. In order for people to consider utilization of VCT services the foregoing findings should be addressed in the context of other identified perceived barriers to accessing VCT.

5.2.6 Limitations of the study

Below are some of the limitations that were identified during the course of the study:

- Participants from the study area may not be a good representative of residents of Windhoek. Samora Machel Constituency in the Greenwell Matongo is an informal settlement area and generalizing the findings to other informal settlement areas or residents of Windhoek should be done with caution.
- The desire was to interview 20 or less households per PSU, which would have raised the number of PSU's in the sample, but due to unavailability of respondents and budget constraints it was not possible. Resultantly the number of respondents interviewed came down to 200.
- The 2001 Population and Housing Census information was used to determine the average household size for the specific target group, but it is possible that the selected PSU's may have had lesser average household size for the target group, hence a decrease in eligible household members.
- The margin of error was high
- Some of the eligible household members (respondents) were drunk during the time of the interviews thereby reducing the number of interviewees.
- The study employed a single data collection method which does not allow for testing the reliability of data. A structured questionnaire was used to collect the data. Literature has proven that information is usually missed with structured questionnaires because spontaneous remarks by respondents are not recorded or probed

- The use of multiple interviewers could have brought interview-induced inconsistency and variability in answers reported by respondents.

In light of the above limitations, it is important to exercise caution when quoting or interpreting the results of this study. The findings, however will serve to provide useful baseline data that could help guide subsequent studies in the subject area.

5.3 RECOMMENDATIONS.

Based on the study findings, utilization of VCT by adults aged between 15 and 49 may improve if the following recommendations are taken into consideration during planning of such services:

Ministry of Health and other VCT Service Providers

The recommendations below relate to the MoHSS and other VCT service providers in Namibia:

- Knowledge about HIV/AIDS in Namibia seems to be very high, however there is need for the Ministry of Health and Social Services (MoHSS) as well as other VCT service providers to positively reinforce provision of such information particularly technical information. People need to clearly understand the importance of getting tested as it relates to changing their sexual behaviours, planning future, accessing care and treatment amongst others.
- More information about the benefits of getting tested for HIV should be disseminated through multi-medial channels. Both the electronic and print media should double their efforts of targeting men to access VCT services.

- The media should be utilized to educate people about HIV/AIDS and the availability of ART as well as how the treatment works.
- The MoHSS and other VCT service providers should enhance their efforts to scale up provision of mobile/outreach VCT services in Namibia. This would help cut down costs incurred by clients when they access VCT services. Where possible VCT services should be provided free of charge.
- All VCT service providers should make provision to issue HIV results to their clients on the same day.
- Churches should be encouraged to play a supportive role towards infected and affected congregants.
- The government of Namibia through the MoHSS should conduct workshops aimed at parental involvement in encouraging their children and family members to access VCT. This activity can be strengthened by empowering parents with the right knowledge and skills to do so. This can be realized through encouraging them to get tested and or educating them on the importance of VCT and how they can help encourage family members to utilize VCT services.

Future Social Work research

The following recommendations should be highly considered by Social Work students who are considering carrying out research studies in the area of HIV/AIDS or VCT in particular:

- An almost similar study with a broadened scope, in terms of geographical coverage and sample would need to be done before generalization of results to the

population of Namibia. A mixture of both qualitative and quantitative methods would help clarify or answer some hanging questions.

- There is need for a qualitative investigation of why people do not utilize VCT services. Participants should be able to list and rank psycho-social factors that discourage them from using VCT services.
- Conduct qualitative research to understand some lived experiences of people who have gone through VCT and tested either HIV positive or negative.
- Conduct research to establish whether decisions to go for HIV testing are based more on external factors (beyond the individual's control) or internal factors (within the individual's control).

REFERENCES

- Alwano, M.G., Roels, T.H., Mokomane, M., Mwasalla, V., Molosiwa, R., & Kilmarx, P.H. (2004). The effect of introducing antiretroviral therapy in the public setting on utilization of voluntary counseling and testing (VCT) services in Botswana - 2001-2003. International Conference on AIDS (15th: 2004: Bangkok, Thailand). *Int Conf AIDS*. 2004 Jul 11-16; 15: abstract no. MoOrD1035
<http://gateway.nlm.nih.gov/MeetingAbstracts/ma?f=102279268.html>
- Allan, S., Serufilira, J., Bogaerts, J., Van de Perre, P., Nesengumuremyi, F., Lindan, C., et al. (1992). Confidential HIV testing and condom promotion in Africa: impact on HIV and gonorrhoea rates *Jama* 268 (23), 3338-3343
- Arthur, G., Mutemi, R., & Odhiambo, J. (2000). Voluntary counselling and testing: Improving access for the poor through integrating same day services into public primary health care clinics. Presented at the X111th International AIDS Conference. July 9-14 1998; Durban.
- Baggaley, R., (1998). HIV Counselling and Testing in Zambia: The KARA Counselling Experience in SAFAIDS 6(2) 1-9).
- Baggaley, R., (1997). Knowledge and attitudes towards HIV and AIDS and sexual practices among university students in Lusaka, Zambia and London, England: are they so different? In *Journal of the Royal Society of Health*, 3 (117):88-94.

Barnabas, L., Ntokozo, M., & Thenjiwe, M. (2005). "Things are so wrong out there" The experiences of women living with HIV/AIDS in accessing sexual and reproductive health and rights in KwaZulu Natal, South Africa: A study with women living with HIV/AIDS. Gender AIDS Forum, Durban.

Bhagwanjee, A., Petersen, I., Akintola, O., & George, G. (2008). Bridging the gap between VCT and HIV/AIDS treatment uptake: perspectives from a mining sector workplace in South Africa. *African Journal of AIDS Research*, 7(3): 271-279

Bhat, G., Bakari, J. P., Mckenna, S., Myrick, A. & Mwinga, K. (1998). Voluntary confidential HIV testing improves overall acceptability among prenatal women in Zambia. Presented at the X11 International Conference on HIV/AIDS; 17-21 July 1998; Geneva.

Bhuiya, I., Rob, U., Khan, M.E., & Alkabir, A. (2000). Reproductive health Service for Adolescents: Recent experiences from a pilot project in Bangladesh. Presented at the International Conference on Adolescent Reproductive Health; Evidence and Program Implications for South Asia; 1-4 November; Mumbai

Boswell, D. & Baggaley, R. (2002) Voluntary Counselling and Testing and young people: a summary review. New York. Family Health International.

- Capenter, C., Cooper, D.A., Fischl, M.A., & Gatell, J.M. (2000). International AIDS Society. Antiretroviral therapy in adults. *Journal of the American Medical Association*. 283:3 381-389.
- Cartoux, M. (1999). Evaluation of 2 techniques of HIV pre-test counseling for pregnant women in West Africa. DITRAME Study Group. *International Journal of STD and AIDS*, 1999, 10: 199-201.
- Coates, T. (2000). The Voluntary HIV-1 Counselling and Testing Efficacy Study Group. Efficacy of Voluntary HIV-1 counselling and testing in individuals and couples in Kenya, Tanzania, and Trinidad: A randomized trial. *Lancet* 356:103-112.
- Damesyn, M., Stiehm, E.R, Neumann, C.G, Morisky, D., & Omwomo, W.O. (1998). Locally sustainable administration of HIV counselling and testing to young couples in rural regions of Western Kenya. Presented at the International Conference on HIV/AIDS; 1998; 12: 869-70 (abstract). Available online <http://www.gateway.nlm.nih.gov/MeetingAbstracts/ma?f=10223180.html>. (Accessed 2007 March 7).
- De Bruyn, M., (2001). Violence, Pregnancy and abortion. Issues of women's rights and public health. Chapel Hill, NC. Ipas.

DeCock, K.M. & Claisson, R.E., (1999). Will DOTS do it? A reappraisal of tuberculosis control in countries with high rates of HIV infection. *International Journal of TB and Lung disease*. 3(6); 457-465. Available on online <http://pt.wkhealth.com/pt/re/tmih/abstract> (Accessed on 2007 August 10).

Directorate of Special Programmes (2006). Ministry of Health and Social Services. Republic of Namibia. Progress Report on the Medium Plan On HIV/AIDS: April – March 2006
Windhoek.

Directorate of Special Programmes. (2005). Ministry of Health and Social Services (MOHSS). Republic of Namibia. Report of the 2004 National HIV Sentinel Survey. Windhoek.

Directorate of Special Programmes (2005). Ministry of Health and Social Services (MOHSS). Republic of Namibia. Voluntary Counselling and Testing Guidelines. Windhoek.

(DSP) Directorate of Special Programmes (2004). Ministry of Health and Social Services. Republic of Namibia. Third Medium Term Plan: The National Strategic Plan on HIV/AIDS. Windhoek.: Capital Press.

Fauci, A.S. (2001). Infectious Disease. Consideration for the 21st century. African Medical Journal. Vol7.675-85.

(FHI) Family Health International. (2003). Voluntary Counselling and Testing for HIV

(Online). Available from:

<http://www.fhi.org/en/HIVAIDSPublications/Factsheets/vctforhiv.htm>.

(Accessed 2006 April 6)

Fylkesnes, K.A., Haworth, C., Rosenvard, V. & Kwapa, P. (1999). HIV Counselling and Testing: Overemphasizing high acceptance rates a threat to confidentiality and the right to know. AIDS13:2469-2474

Global AIDS Epidemic Report., (2008). Addressing Societal Causes of HIV risk and Vulnerability. Geneva, Switzerland. Pp63-94.

Government of the Republic of Namibia (October 2003). 2000 Namibia Demographic and Health Survey Report, Windhoek, Namibia.

Gupta, G.R. (2002). Vulnerability and Resilience: gender and HIV/AIDS in Latin America and the Caribbean. International Centre for Research on Women (ICRW). Working Paper.

Hamavhwa, C., Howarth, A. (1998). Critical realities of HIV/AIDS counselling in a developing country with high prevalence levels. Presented at the XI International Conference on HIV/AIDS; 17-21 July 1998; Geneva.

Horizons Programme. (2004). Attracting youth to voluntary counseling and testing services in Uganda. Research Summary. Washington: Population Council. Available online.

<http://www.popcouncil.org/horizons/resum/vctythsumdesc.html>.

(Accessed 2006 March 3).

Horizons Programme. (2001). HIV Voluntary Counselling and Testing among Youth aged 14-21: Results from an exploratory study in Nairobi, Kenya and Kampala and Masaka, Uganda. New York: Population Council Incorporated.

Jackson, H. (2002). AIDS Africa, Continent in Crisis. Harare: SAFAIDS.

LaFraniere S. (2005, August 11). Entrenched epidemic: Wife beatings in Africa.

The New York Times.

Iiysu, Z., Kabir, M., Galadanci, H.S., Abubakar, I.S., & Aliyu, M.H. (2005). The clinical challenge of the HIV epidemic in the developing world. Niger Journal of Medical. January - March: 14 (1): 27-32.

Kamenga, M., Ryder, R., Jingu, M., Mbuyi, N., Mbu, L., Behets, F., et al. (2000).

The voluntary HIV-1 counselling and testing efficacy study:

Design and Methods. *AIDS and Behaviour*, 4:1 5-15.

Katongo, E. (2000). Voluntary counselling and testing of HIV in Mufulira, Zambia.

Presented at the 13th International Conference on HIV/AIDS; 17-21 July 2000;

Durban.

Keogh, P., Allen S., Almedal C., & Temahgili B. (1994) The Social Impact of HIV

infection on Women in Kigali, Rwanda: a prospective study. *Social Science*

and *Medicine*, 38:8 1047-53. (Online) From

<http://www.websciences.org/cftemplate/NAPS/archives/indiv.cfm?ID=19941458>

Kipitu, U. (2005). Quality of Voluntary Counselling and Testing: clients' experiences,

expectations and satisfactions in Mbeya Tanzania. Fonds Chalumeau

Scholarship (Online) From

http://gfmer.ch/Medical_education_EN/PGC_RH_2005/pdf/VCT

(Accessed 2006 March 3).

Le Franc, E., Wyatt, C., Chambers, D., Eldemire, B., Bain, C., & Ricketts, L. (1996).

“Working women’s sexual risk taking in Jamaica” *Social Science and Medicine*.

42(10):1411-7.

LeaBeau, D., Mufume, P., (2001). The Influence of Poverty on the Epidemiology of HIV/AIDS and its Subsequent Reinforcement of Poverty Among Economically Marginalized Families in Northern Namibia. Paper presented at the Southern African Universities Social Science Conference.

Malonzo, I.M., Richardson, B.A., Kreiss, J.K., Bwayo, J.J., Stewart, G.C. (2003). The effect of rapid HIV testing on uptake of perinatal HIV-1 interventions: a randomized clinical trial. In the Journal of AIDS.

Maman, S., Mbwambo, J., Hogan, M., Kilonzo, G., Sweat, G., Weiss, E., (2003). HIV Partner Violence: Implications for HIV Voluntary Counselling and Testing Programs in Dar es Salaam, Tanzania. The Population Council, New York.

Maman, S., Mbwambo, J.K., Hogan, N.M., Kilonzo, G.P., Campbell, J.C., & Weiss, F.E. (2002). HIV-Positive Women Report More Lifetime Partner Violence: Findings from a Voluntary Counseling and Testing Clinic in Dar es Salaam, Tanzania. *Am J Public Health*. 2002 August; 92(8): 1331–1337 (Online)
Available from
<http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1447239>.
Accessed 2008 July 13.

Maman, S.J., Mbwapambo, M., Hogan, G., Kilonzo, E., & Sweat, M. (2001). "Women's barriers to HIV testing and disclosure: Challenges for voluntary counselling and testing programmes." *AIDS Care* 13(5):595-603.

Matovu, J.K.B., & Makumbi, F.E. (2007).

Expanding access to voluntary HIV counselling and testing in sub-Saharan Africa: alternative approaches for improving uptake, 2001-2007.

Tropical medicine & international health : TM & IH 2007;12(11):1315-22.

Accessed:

http://www.biomedexperts.com/Abstract.bme/17949401/Expanding_access_to_voluntary_HIV_counselling_and_testing_in_sub-Saharan_Africa_alternative_approaches_for_improving_up.

McCauley, A.P. (2004). Equitable access to HIV counseling and testing for youth in developing countries: a review of current practice. Horizons Report. Washington, DC: Population Council.

Mkwanazi, N.B., Patel, D., Newell, M.L., Rollins, N.C., Coutsooudis, A., & Coovadia H.M. (2008). Africa Centre for Health and Population Studies, University of KwaZulu-Natal, Durban, South Africa. Rapid testing may not improve uptake of HIV testing and same day results in a rural South African community: a cohort study of 12,000 women. *PLoS ONE*. 2008; 3(10):e3501. (Online) Available from <http://hivthisweek.unaids.net/category/hiv-testing>
Accessed 2008 Sept 13.

- Ministry of Health and Social Services. (2008). Namibia Demographic and Health Survey 2006-07. Windhoek, Namibia: MoHSS.
- Ministry of Health and Social Services. (2005). Report of the 2008 National Sentinel Survey. Windhoek. Namibia.
- Msowoya, K., Marum, E., & Barnaba, A. (2000). Four-fold increase of voluntary HIV counselling and testing in Malawi with same day results counselling and confirmed, rapid finger prick testing. Presented at the 13th International Conference on HIV/AIDS; 9-14 July 2000; Durban.
- Munthali, A.C., Chimbiri, A., & Zulu, E. (2004). Adolescent sexual and reproductive health in Malawi: a synthesis of research evidence. Occasional report No. 15. Washington: The Allan Guttmacher Institute.
- National Youth Council of Malawi. (2000). Assessment of Youth Friendly health services in Blantyre, Lilongwe, Mchinji, kasungu and Mzimba districts. Lilongwe: NYCOM.
- Nawa Life, Trust/John Hopkins University. (2007). Namibia HIV/AIDS Community Survey Report, Rundu, Walvis Bay, Keetmanshoop and Oshakati.

Nyblade, L., & Field, M.L. (2000). Women communities and the prevention of mother to child transmission of HIV: issues and findings from community research in Botswana and Zambia. Washington, International Centre for Research on Women.

Peltzer, K. (2000). Factors affecting condom use among junior secondary school pupils in South Africa. *Health SA Gesondheid*. 5(2), 2000:37-44.

Perloff, R.M. (2001). Persuading people to have safer sex. *Applications of Social Science to the AIDS crisis*. Mahwah, New Jersey: Lawrence Erlbaum.

Pettifor, A.E., Rees, H.V., Steffenson, A., Hlongwa-Madikizela, L., Macphail, C., Vermaak, K. et al. (2004). HIV and Sexual behaviour among young South Africans: a national survey of 15 -24 year olds. Johannesburg: Reproductive Health Research Unit, University of Witwatersrand.

Phillips, K.A., Coates, T. J., & Catania, J.A. (1997).

[Predictors of follow-through on plans to be tested for HIV.](#)

American journal of preventive medicine 1997; 13(3):193-8. Accessed on:

[http://www.biomedexperts.com/Profile.bme/251097/Thomas_J_Coates.](http://www.biomedexperts.com/Profile.bme/251097/Thomas_J_Coates)

Polit, D.F., & Hungler, B.P., (1999). *Nursing Research: Principles and Methods*. 4th edition. Philadelphia: JB Lippincott.

Pool, R., Nyanzi, S., & Whitworth, J.A.G., (2001). Attitudes towards voluntary counselling and testing for HIV among pregnant women in rural South West Uganda. *AIDS Care*, 13(5), 605-615.

Population Services International. (2006). Marketing HIV Counselling and Testing update, Washington. (Online) Available from <http://scholar.google.com/scholar?q=PSI+marketing+HIV+counseling+testing+2006> (Accessed 2008 Sept 13).

Population Services International. (2005). Fear, Shame and Peace of Mind: Motivations and Barriers to VCT Utilization among Most at Risk Populations in Vietnam. First Report: PSI, Vietnam.

ReCAPP. (2005). Theories and approaches. Health Belief Model. <http://www.etr.org/recapp/theories/hbm>. Accessed on 12/03/08

Rosenstock, I., Strecher, V., & Becker, M., (1994). The Health Believe Model and HIV risk behaviour change. In R.J. D Clemente and J.L. Peterson (eds), *Preventing AIDS: Theories and Methods of behavioural interventions*. (pp. 5-24) New York: Plenum Press.

- Rothenberg, K.H. (1995). Domestic Violence and Partner notification: implications for treatment and counseling of women with HIV. *Journal of the American Medical Women's Association*, 50: 87-93.
- Sarjana, I.G.P., Wiyadnyana, I.B. & Kauce, Y. (1999). Reception of people with HIV and AIDS by health care providers and the community. A qualitative study on social discrimination experienced by people with HIV and AIDS in Bali. Unpublished.
- Sehonou, J., Baggaley, R., Sulwe, J., & Kelly, M. (1999). Non Governmental Organizations Against AIDS in Africa: The Anonymous Testing Centre of Bangui for Voluntary Counselling and Testing in the Central Republic. *Journal of Acquired Immune Deficiency Syndrome*: 1;31(1):106-114.
- Sherr, L., Lopman, B. Kakowa, M. Dube, S. Chawira, G. Nyamukapa, C. et al. (2007). Voluntary Counselling and Testing: Uptake, Impact on Sexual Behaviour, and HIV incidence in a rural Zimbabwean cohort. *Journal of AIDS*, 21 (7): pp 851-860.
- Siegel, K., & Schrimshaw, E., W., (2002). The Perceived Benefits of Religious and Spiritual Coping Among Older Adults Living with HIV/AIDS. *Journal for the Scientific Study of Religion*, 41(1):91-102
(Online) Available from: <http://www.3.interscience.wiley.com/journal>.
Accessed 2008 Sept 13).

Social Impact Assessment and Policy Analysis Corporation. (2005). Final Report: Follow Up Survey: Social Marketing of Voluntary Counseling and Testing Services and the Promotion of Reproductive Health in Namibia. Windhoek, Namibia: Social Impact Assessment and Policy Analysis Corporation (Pty) Ltd.

Stein J. (1996). Coping with HIV infection: The theory and the practice.

African Anthropology 3 (2): 6783.

Temmerman, M., Ndinya-Achola, J., Ambani, J., & Piot, P. (1995). 'The right to know HIV test results.' *Lancet* 345(8955):969-970.

Temmerman, M., & Gaillard, P. (1994). The right to know HIV-test results. *Lancet*, 345:696-697.

UNAIDS. (2008). Sub-Saharan Africa. AIDS Epidemic Update 07. Regional Summary. Geneva. Switzerland.

UNAIDS / WHO. (2003). AIDS epidemic update, 2003 Report No: UNAIDS/03.39E. Geneva, Switzerland.

UNAIDS. (2001). The impact of Voluntary counseling and testing: A global review of the benefits and challenges. (Online) Available from <http://www.unaids.org>. Accessed 2006 April 11.

United Nations AIDS. UNAIDS Technical Update. (2000). Voluntary Counselling and Testing, Geneva. (Online) Available from <http://www.unaids.org>. unaids@unaids. Accessed 2006 April 11).

United Nations AIDS. Geneva. (1999). Knowledge is Power: Voluntary HIV Counselling and Testing in Uganda, A Case study. (Online) Available from: <http://wmc.who.int/images/uploaded/knowledgeispower.pdf>. (Accessed 2006 March 13).

UNICEF, UNAIDS & WHO. (2002). Young people and HIV/AIDS: Opportunity in crisis. New York

United States Agency for International Development. (2003). USAID's Activities: Voluntary Counseling and Testing (Online) Available from: <http://www.Research\USAID Health HIV-AIDS, Technical Areas, USAID Activities, Voluntary Counseling and Testing>. (Accessed 2006 February 13).

(U.S. D.H.H.S) United States Department of Health and Human Services. (1994). HIV Counselling, Testing and referral Standards and Guidelines.

Van Dyk, A.C., & Van Dyk, P.J. (2003) "What is the point of knowing?" Psycho-social barriers to voluntary counseling and testing programmes in South Africa. *South African Journal of Psychology*, 33 (2):pp. 118-125.

Van Dyk, A.C. (2001). Traditional African beliefs and customs: Implications for AIDS education and prevention in Africa. *South African Journal of Psychology*. 31(2):60-66.

Van Overloop, C.E., Mpanya, I.G., Kabamba, T.J., Pedrique, B., & Zachariah, R. (2004).

Rapid whole blood HIV testing increases return rates after voluntary counseling and testing (VCT) in primary health facilities in Kinshasa, the Democratic Republic of Congo. (Online) available from

<http://gateway.nlm.nih.gov/MeetingAbstracts/ma?f=102284697.html>

Int Conf AIDS. 2004 Jul 11-16; 15: abstract no. WePeE6783. (Accessed 2009, August 12).

(WHO) World Health Organization. (2004). Antiretroviral therapy in primary health care: Experience of the Khayelitsha Programme in South Africa. Geneva:

(WHO) World Health Organization. (2002). Coverage of selected health services for HIV prevention and care in less developed countries. International HIV Treatment Access Coalition: Geneva.

WHO, HIV/AIDS. (2002). Strategic framework to Decrease the Burden of TB/HIV. Switzerland: Geneva.

WHO. (2000). Voluntary counseling and testing for HIV infection in antenatal care: practical considerations for implementation. World Health Organization/HIV/AIDS and Sexually Transmitted Infections Initiative. Switzerland: Geneva.

WHO. (1996). Groups at Risk: WHO Report on the Epidemic. World Health Organization. Geneva, Switzerland:

Yoder, P. S., & P, Matinga. (2004). Voluntary Counselling and Testing (VCT) for HIV in Malawi: Public Perspectives and recent VCT experiences. Calverton, Maryland, USA: ORC Macro.

Zavis, A. (2006, January 10). Botswana adopts new approach to AIDS tests. The Namibian.

ANNEXURE

Confidential

Form Number _____

**STUDY ON THE UTILIZATION OF VCT
SERVICES**

PART A: Identification Information

Region _____

Health District _____

PART B: Demographic Information (Cross out where applicable)

B1. Sex of client:

1 Female _____

2 Male _____

B2. Age (completed years) _____

B3. What do you do to earn a living?

1. Unemployed

2. Student

3. Miner/Mining industry
4. Farm worker
5. Professional
6. Police/Military/Security
7. Domestic worker
8. Trucker/Transport business
9. General worker
10. Self employed
11. Vendor
12. Other

B4. Marital status:

1. Never married
2. Married
3. Living with partner
4. Divorced/Separated
5. Widowed

B5. Highest level of education completed:

1. Primary
2. Secondary
3. University or higher
4. None

PART C: Current HIV/AIDS Status (Cross out where applicable)

C1. Have you ever been tested for HIV before?

1. Yes
2. No

C2. When was the last time you went for HIV testing?

1. Last 6 months
2. Last year
3. Last 2 years
4. More than 2 years ago
5. No response

C3. Where did you go for the test?

1. Public hospital/Clinic
2. Private clinic/doctor
3. Private hospital
4. Private laboratory
5. Mission hospital/clinic
6. New Start VCT centre
7. Workplace health services
8. Mobile VCT

9. Other NGO/CBO/FBO services specify

C4. The last time you went for HIV testing, were you told your results?

1. Yes
2. No

C5. Receiving HIV results the same day is better than waiting a longer period

1. Yes
2. No

C6. In your opinion, are more people getting tested because of rapid HIV testing?

1. Yes
2. No

C7. Did you pay for being tested for HIV?

1. Yes
2. No

C8. If yes in C7, How much did you pay for the service?

N\$ _____

C9. If No in C7, How much would you be willing to pay for HIV testing?

N\$ _____

C10. Was the price affordable?

1. Yes
2. No

C11. Approximately how far did you travel (in kilometers) to access services?

1. Less than 1 km
2. 1-10km
3. More than 10km

C12. Approximately how far are you willing to travel (in kilometers) to access services?

1. Less than 1 km
2. 1-10km
3. More than 10km

For those Never Tested before (If No in C1)

C13. Do you know of a place where you can get tested and receive results the same day
(rapid HIV testing)

1. Yes
2. No

C14. Would you prefer to get tested and receive your HIV results the same day?

1. Yes
2. No

C15. How much are you willing to pay for HIV testing? N\$ _____

C16. In your opinion, are more people getting tested because of rapid HIV testing?

1. Yes
2. No

PART D: Knowledge about HIV/AIDS, for all persons (Cross out where applicable)

D1. Is there a cure for AIDS?

1. Yes
2. No
3. DK/Not sure

D2. Do you know of a treatment that can prolong the life of a person living with HIV/AIDS?

1. Yes
2. No

D3. If Yes in C2, What is the treatment?

1. ARV
2. Local herbs
3. Faith healing/prayer
4. Treatment for opportunistic infection
5. Good nutrition
6. Other (specify)

PART E: Social Support, for all persons (Cross out where applicable)

E1. Do your parents encourage you to go for HIV testing?

1. Yes
2. No
3. NA

E2. Would your church pastor support you if you were to test HIV positive?

1. Yes
2. No
3. NA

E3. Do you and your friends encourage each other to go for HIV testing?

1. Yes
2. No
3. NA

E4. Would your parents support you if you were to test HIV positive?

1. Yes
2. No
3. NA

E5. Would your friends accept you if you were to test HIV positive?

1. Yes
2. No
3. NA

PART F: Outcome Expectations, for all persons (Cross out where applicable)

F1. Testing positive for HIV brings on AIDS (accelerates death.)

(1). strongly disagree (2). Disagree (3). Neither agrees nor disagree (4). Agree strongly (4). Agree. (6). N/A

F2. Getting tested for HIV will give me peace of mind and freedom from worries.

(1). strongly disagree (2). Disagree (3). Neither agrees nor disagree (4). Agree strongly (4). Agree. (6). N/A

F3. I would want to get tested in order to gain access to ARVs or other medical treatment.

(1). strongly disagree (2). Disagree (3). Neither agrees nor disagree (4). Agree strongly (4). Agree. (6). N/A

F4. Knowing one's HIV status is important for positive living

(1). strongly disagree (2). Disagree (3). Neither agrees nor disagree (4). Agree strongly (4). Agree. (6). N/A

PART G: Availability of ART, for all persons (Cross out where **applicable**)

G1. More people are going for HIV testing because of availability of ART

1. Yes
2. No

G2. I know someone whose health has improved due to ART

1. Yes
2. No

G3. HIV treatment (ARV) is readily available if one needs it

1. Yes
2. No

G4. Public Hospital/Clinic near where I live offer free ARVs

1. Yes
2. No

PART H: Quality of VCT services, for all persons (Cross out where applicable)

H1. VCT staff members are very careful not to reveal private patient information.

(1). strongly disagree (2). Disagree (3). Neither agrees nor disagree (4). Agree strongly (4). Agree. (6). N/A

H2. HIV test results and records are kept confidentially.

(1). strongly disagree (2). Disagree (3). Neither agrees nor disagree (4). Agree strongly (4). Agree. (6). N/A

H3. Counselors are very gentle and supportive.

(1). strongly disagree (2). Disagree (3). Neither agrees nor disagree (4). Agree strongly (4). Agree. (6). N/A

H4. Nurses are very gentle and supportive

(1). strongly disagree (2). Disagree (3). Neither agrees nor disagree (4). Agree strongly (4). Agree. (6). N/A

H5. HIV test results are neither accurate nor reliable.

(1). strongly disagree (2). Disagree (3). Neither agrees nor disagree (4). Agree strongly (4). Agree. (6). N/A

H6. Counselors are mean and sometimes yell at patients.

(1). strongly disagree (2). Disagree (3). Neither agrees nor disagree (4). Agree strongly (4). Agree. (6). N/A