

**FACTORS AFFECTING VOLUNTARY COUNSELING AND HIV TESTING
AMONG PREGNANT WOMEN IN TSUMEB DISTRICT, OSHIKOTO REGION,
NAMIBIA.**

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KEY WORDS

- HIV/AIDS
- Voluntary Counseling and HIV testing
- Pregnant Women
- Mother to child Transmission
- Prevention of mother to Child Transmission
- Uptake
- Confidentiality
- Barriers
- Knowledge
- Stigma



ABSTRACT

Background

Voluntary counseling and Testing in PMTCT has an important role to play Namibia's response to the HIV epidemic among women of childbearing age. In fact, the cornerstone of a successful PMTCT program is a high rate of HIV testing among pregnant women in order to identify who are positive and at risk of transmitting the virus to their babies. For effective PMTCT, there is a need to integrate VCT into antenatal care (ANC) and maternity care, rather than providing it through a separate VCT unit. There is also a need to understand that counseling and HIV testing must be confidential and voluntary, and the quality of these services have a high impact on the uptake of VCT services

Aim

The aim of this study was to assess VCT and factors that contribute to its low uptake among pregnant women affecting ANC clinics in the public sector. The study determined the quality of the counseling and testing provided; assessed the knowledge, attitude and practice (KAP) of women regarding the VCT/PMTCT services and identified barriers that prevent pregnant women from utilizing VCT services.

Method

A cross-sectional descriptive study design was used in which data was collected using a structured questionnaire administered in a face to face interviews. The study was conducted in Tsumeb district, Namibia at three clinics; Tsumeb, Lombard and Oshivelo clinics between 12th April and 15th June 2006 and the study sample

comprised of one hundred and fifty (150) pregnant women aged <15- 49+ years. Informed consent was obtained from each participant prior to commencing the interview. Closed-ended questions were analyzed using nominal scales into mutually exclusive categories and frequencies. Open-ended questions responses were analyzed using post-coding prior to entering data.

Results

In contrast to the expected results, the uptake of Voluntary Counseling and HIV Testing in PMTCT by pregnant women was found to be high across all three study sites.

It was evident from the findings that the pregnant women were aware of HIV transmission and protection and they knew about the VCT/HIV services available at the clinics, as well as treatment and care provided in PMTCT program. The clinics are accessible and available to these particular women utilizing the services.

Participants said they appreciated the benefit of enrolling in PMTCT although they identified factors that influence VCT/PMTCT uptake to include; fear of stigma, discrimination and rejection from families and community members. Fear for confidentiality about test results or status, attitudes of health workers or community counselors were also raised as well as concerns about lack of rapid test at some clinics.

Conclusions

Increased uptake of VCT services by pregnant women may be attributed to the development of counseling services and increased availability of rapid tests at the study clinics by the Namibian Health and Social Services. A high knowledge and

understanding of HIV and VCT services by pregnant women also probably contributed.

Recommendations

Recommendations include continuing development of HIV and VCT services and roll-out to all sites in Namibia, and community-focused and culturally appropriate awareness raising about HIV, in order to address significant issues around stigma and discrimination.



DECLARATION

I declare that *Factors affecting Voluntary Counseling and HIV testing among pregnant women in Tsumeb District, Oshikoto Region, Namibia*, is my own work, that is has not been submitted for any degree or examination in any university, and that all the sources I have used or quoted have been indicated and acknowledged by complete references.

Maria N. Shangula

November 2006

Signed:.....



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LIST OF ABBREVIATIONS

AIDS	Acquired Immuno Deficiency Syndrome
ANC	Antenatal Care
HIV	Human Immuno-deficiency Virus
KAP	Knowledge, Attitude and Practice
MOHSS	Ministry of Health and Social Services
MTCT	Mother-to-child Transmission of HIV
NACOP	National Aids Coordination Programme
PLWHA	People living with HIV/Aids
PMTCT	Prevention of Mother-to-Child Transmission of HIV
STI	Sexually Transmitted Infections
TB	Tuberculosis
TBA	Traditional Birth Attendants
UNAIDS	Joint United Nations Programme on HIV/AIDS
VCT	Voluntary Counseling and HIV Testing
WHO	World Health Organization



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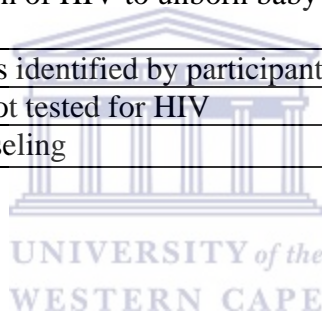
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CHAPTER 1 INTRODUCTION AND ORIENTATION TO THE STUDY

1. Introduction

This chapter includes the introduction and orientation to the study in which the background, study setting, formulation of research problem, the purpose of the study and an outline of the report are given.

1.1 Background

No other disease has captured people's attention in recent times as much as HIV. In 1987, the World Health Organization (WHO) first recognized the seriousness of the emerging AIDS epidemic (Hubley, 1995) and since then HIV has become a global problem. In 2003 an estimated 5 million people acquired the human immunodeficiency virus (HIV) bringing to 40 million the number of people living with the virus around the world and of these 40 million, 26.6million people are in Sub-Saharan Africa (MOHSS, 2004). HIV prevalence varies considerably across the African continent, ranging from less than 1% in Mauritania to almost 40% in Botswana and Swaziland (MOHSS, 2004). Namibia has the fifth highest HIV prevalence rate in the world, exceeded only by four of its neighbors (Botswana, Swaziland, Zimbabwe and South Africa). Since the first four HIV cases were reported in Namibia in 1986, in a population of just 1.8 million, over 50,000 have already died of AIDS and 230,000 adults and children are living with HIV (MOHSS, 2004). This has resulted in AIDS being the leading cause of death since 1996 in Namibia. In 1999, AIDS was responsible for 26% of all reported deaths, and for 46% of deaths in the 15-49 year age group. Of 44,250 HIV tests done in 2001, 38% were HIV positive (MOHSS, NCCM. 2002). One of the greatest challenges facing Namibia is the future of its children-

orphans and vulnerable children. Currently, Namibia has 114,556 total orphans of which over 60, 000 are AIDS orphans. These numbers are projected to increase to 206, 000 by 2010, of which 161,000 would be AIDS orphans and by 2021 there is expected to be a total of 251, 000 orphans, of which 197, 000 would be AIDS orphans (MOHSS/NACOP, 2003).The health of mothers of childbearing age and of the unborn babies is influenced by many factors some of which include HIV infection among pregnant women. The World Health Organization (WHO) estimates that the rates of Mother to Child Transmission of HIV ranged from 13% to 32% in developed countries and 25% to 48% in developing countries (MOHSS, 2004). In South Africa, it has been estimated that the rate of HIV infection among pregnant women is close to 30% in some areas (Bridget, 2002). In Namibia, provisional findings give a national 2002 HIV prevalence rate among pregnant women of 23.3%, rising to as high as 43% in the North-East of Namibia (MOHSS, 2004). It is this high prevalence that precipitated the integration of antenatal care (ANC) and Voluntary Counseling and HIV Testing (VCT) services within the overall PMTCT-plus program to provide comprehensive ANC, VCT, supportive counseling, nutrition support and Highly Actively Antiretroviral Therapy (HAART) to pregnant women, partners and children. According to the third medium term plan (MTP III 2004-2009), in Namibia 90% of HIV pregnant women, partners and their babies should have access to VCT in PMTCT plus services and requires to receive a complete course of ARV prophylaxis to prevent Mother to Child Transmission of HIV when diagnosed HIV positive. Improving access to VCT services are widely regarded as a key component in identifying and managing HIV infection (MOHSS, 2004). In Namibia, the primary intervention to integrate the PMTCT activities within the normal health care

delivery system commenced in March 2002 at Katutura hospital in Windhoek and in April 2002 in Oshakati hospital, Oshana region. Since that time, it has been established that the use of the ARV medicine, nevirapine, reduces the proportion of children who become infected vertically to 3% and below (MOHSS, 2004). This intervention led to the expansion of PMTCT services and establishment of anti- retroviral treatment in different district in 2004 and it will be rolled out to cover the entire country as from 2005. It was shown that out of more than 500 babies who were born by HIV positive mothers at Katutura and Oshakati hospital and who received nevirapine according to the schedule, only 4 babies tested positive after 18 months of follow-up, which represent 0.8% prevalence ratio (MOHSS, 2004).

HIV preventive programs, including the Prevention of Mother to Child Transmission of HIV (PMTCT) are potentially the most effective health interventions in reducing maternal and neonatal morbidity and mortality (National Safe Motherhood Conference, 1991). In Namibia without any VCT in PMTCT interventions for every 300 children born to HIV infected women about 100 will become infected (MOHSS, 2004). The social conceptualization and representation of HIV testing influence HIV test uptake rates. Some factors that have been alleged to deter people from testing include lack of awareness or knowledge about infection rates in ones community, fear of being labeled and stigmatized by significant others, lack of knowledge about available treatment, user friendliness of testing sites and perception of the consequences of living with HIV.

According to the district annual statistic for 2004, only 15% of the total population of women has utilized the VCT/PMTCT provided in antenatal service (MOHSS, 2004).

Therefore this research aimed to identify the factors affecting Voluntary Counseling and HIV Testing uptake among pregnant women in Tsumeb district, Namibia.

1.3 Study setting

The Republic of Namibia covers a total area of 824, 295 square kilometers and is divided into 13 regions. Oshikoto region has a population of 161, 007 (MOHSS, 2000) with 91% of the people living in rural areas. The unemployment rate in Oshikoto is the highest in the country at 45%, with 50% of the household headed by women and 16% of the children under fifteen years of age having lost either one or both parents due to AIDS (MOHSS,2002).Tsumeb district is in the Oshikoto region, of Namibia and has a population of 25,233, projected from the 2001 National Census, with the annual growth rate of 2.2% (MOHSS, 2002); the number of women of childbearing age (15-49) is 6,056 (MOHSS, 2002) and the HIV prevalence rate in Tsumeb is 25% (MOHSS,2002). Tsumeb district consists of two constituencies namely, Tsumeb and Guinas- it covers about 16420 square kilometers of land. The district is mainly a mining and farming area (both commercial and communal). It covers a vast area between Omuthiya, in the northeast, and Grootfontein in the east, Bravo in the northeast, Otavi in the southwest. Tsumeb district hospital serves as a referral to four clinics - Lombard and Tsumeb clinic (in urban) and Tsintsabis and Oshivelo (in rural area). Tsumeb district is a multi ethnic society with Oshiwambo speaking people being in the majority.

The study was carried out at Tsumeb, Oshivelo and Lombard clinics, and at the time of the study all these clinics provided VCT in PMTCT service during ANC. It was decided to exclude Tsintsabis clinic from the study due to low ANC attendance visits and

language difficulties communicating with the mainly San people (Bushman) in this area. ANC staffs working in all the clinics were trained in the VCT, PMTCT programme and the enrolling of pregnant women into the PMTCT programme is done by the PMTCT district coordinator.

1.3 Statement of the problem

The specific problem experienced was the low VCT uptake in the PMTCT program for pregnant women. A pregnant woman whose HIV status is unknown is at an increased risk of obstetric complication such as premature labor, stillbirth or neonatal death. According to the report of the 2002 National Sentinel Survey in Namibia, the HIV prevalence rate for Tsumeb district was 24% (MOHSS, 2004). In Tsumeb district, the PMTCT program was integrated within the ANC service in 2004. During the antenatal care (ANC) services at public sector clinic, all pregnant women are offered group counseling regarding the benefits of VCT in Prevention of Mother to Child Transmission of HIV. It was found, however, that after counseling only a few women stayed on and waited for the HIV test the same day. Furthermore, some of those who opted for HIV testing are not post test counseled and get their results the same day; they need to come back for follow up visits (MOHSS, 2004).

1.4 Purpose of the study

The purpose of this study was to describe the reasons for the low Voluntary Counseling and HIV Testing uptake rate among pregnant women attending antenatal care (ANC) services in public health facilities in Tsumeb district, Oshikoto Region, Namibia.

1.5 Outline of this report

Chapter 1. Introduction to the study, study setting, formulation of the problem, purpose of the study.

Chapter 2. Literature review.

Chapter 3. Research design and methodology: Aims, objectives, definition of terms, study design, sampling, data collection and data analysis procedures, ethical considerations and limitations of the study.

Chapter 4. Results.

Chapter 5. Discussion of the findings, conclusions and recommendations.



CHAPTER 2 LITERATURE REVIEW

2.1 Introduction

The previous chapter provided an orientation to this study by discussing the introduction to the study, study setting, formulation of the problem, purpose of the study, and the outline of the research study. This chapter covers the literature review related to this study. The review of the relevant literature contained in this chapter is centered on the following areas:

Prevalence of HIV/AIDS; Mother to Child Transmission of HIV; Prevention of Mother to Child Transmission of HIV; Voluntary Counseling and HIV Testing as part of MTCT strategy; Uptake and acceptance of Voluntary Counseling and HIV Testing; Factors that affect uptake and acceptability of VCT in PMTCT service and finally a number of socio-economic and cultural barriers to utilization of ANC services are identified.



2.2 Prevalence of HIV/AIDS

In 2003 the global HIV epidemic killed more than 3 million people, 2,3million of whom were in Sub-Saharan Africa. Women in the world and Africa, in particular are experiencing a unique challenge as manifested by the high prevalence of HIV.

The fastest growth in recent years has been in South Africa, where the prevalence of infection in adult women increased from 1% in 1990 to 25% in 2000 (Dabis, et al. 2002). More than one in five pregnant women are HIV-infected in most countries in Southern Africa, while elsewhere in Sub-Saharan Africa median HIV prevalence in ante-natal clinics exceeded 10% in a few countries (Mendel, 2004). HIV infection in East Africa had spread rapidly in the late 1970s and early 1980s and as a result 15-30% of pregnant

women are HIV positive in Uganda (Mendel, 2004). Although HIV was rare in Botswana in the mid-1980s, 43% of pregnant women in its capital city are now HIV positive (Fauci, 2001). Witte, et al. (2003) reported that almost one in four Namibians aged 15 to 49 is infected by HIV. In Namibia, women accounted for 54% and 56% of all reported new HIV cases in 1998 and 2000, respectively (Witte, et al. 2003). Mother to Child Transmission is the most common mode of human immunodeficiency virus (HIV) transmission in children, which can be vertically transmitted from HIV positive pregnant women to her unborn baby during pregnancy, labor or delivery or through breastfeeding.

Namibia ranks as one of the hardest hit countries in the world with 22.3% of pregnant women being HIV positive. According to the report of the 2002 National Sentinel Survey in Namibia, the prevalence has increased in the next age group of pregnant women. “In 2002, HIV prevalence was 22% in the age group 20-24 years, 28% in the age group 25-29 years, 27% in the age 30-34 years, 21% in the age group 35-39 years, 16% in the age group 40-44 years and 12% in the age group of 45 and over” (MOHSS, 2002).

2.3 Mother to Child Transmission of HIV (MTCT)

Mother to child transmission is the most common mode of human immunodeficiency virus (HIV) transmission in children which can be vertically transmitted from HIV positive pregnant woman to her unborn baby during pregnancy, labor and delivery or through breastfeeding. During 2002, UNAIDS estimated that world wide through Mother to Child Transmission approximately 800,000 children acquired HIV infection including 720,000 in Sub-Saharan Africa (MOHSS, 2004). In the developed

world the prevalence of HIV in children has been significantly reduced since the use of the AGTG 076 regime (oral A27 early in pregnancy intravenously during labor, and orally to the infant for six weeks after birth) as the standard of care for HIV positive woman. In Namibia, without any Prevention of Mother to Child Transmission of HIV (PMTCT) intervention, for every 300 children born to HIV infected women, about 100 will become infected. Of those 100 children infected about 16 would have acquired HIV during pregnancy, 50 during labor and delivery and 34 after delivery through prolonged breastfeeding (MOHSS, 2004). Without treatment, the rate of transmission during pregnancy ranges from 5 to 10 percent, during labor and delivery from 5 to 20% and during breastfeeding 10 to 20 % (Bradford, 2004). Therefore the prevention of acquisition of infection in women and reduction of incidence of unwanted pregnancy in HIV positive women will aid global Prevention of Mother to Child Transmission of HIV (PMTCT) by decreasing the neonatal and maternal mortality rates.

2.4 Prevention of Mother to Child Transmission of HIV

The developing world, including Namibia, has seen a continued rise in paediatric HIV cases, most of them through Mother to Child Transmission of HIV (MTCT).

Prevention of Mother to Child Transmission of HIV includes four main strategies:

- Primary prevention of HIV in women of reproductive age.
- Prevention of unintended pregnancy in HIV infected women.
- Prevention of MTCT through the use of antiretroviral therapy (ARV) drugs and other practice.

- Provision of comprehensive care to HIV infected women, partners and children.

Recognizing the severity of the HIV epidemic, the Ministry of Health and Social Services (MOHSS) in Namibia launched Prevention of Mother to Child Transmission of HIV (PMTCT) services in Oshakati, (Oshana Region) and Katutura Hospital in Windhoek, (Komas Region) in March 2002 and introduced antiretroviral therapy (ART) in July 2003. In 2004 the PMTCT services were expanded to the Catholic Services, Lutheran Medical services and to 13 additional State hospitals, (MOHSS, 2004). Overall, however, there was a very low uptake of VCT (<10%) during the pilot PMTCT program, and this was primarily attributed to the lack of trained counselors (MOHSS, 2004).

The cornerstone of a successful PMTCT program is a high rate of HIV testing among pregnant women in order to identify those who are positive and at risk of transmitting the virus to their babies. Therefore routine Voluntary Counseling and HIV Testing should be integrated into ANC, maternity or at any other opportunity to all pregnant women who accept it, to deliver effective PMTCT services rather than being provided through a separate VCT unit (MOHSS, 2004).

In the PMTCT programme, pre-test, post-test and ongoing counseling is offered to all pregnant women, their partners and their families. Routine counseling and testing in the ANC clinic is different from VCT in several aspects such as that in VCT the client seeks the service for the specific purpose of learning their HIV zero-status and to receive counseling regarding the results as well as other information about HIV infection and AIDS. In ANC a pregnant woman is seeking medical care to ensure the health of her baby and herself.

In Namibia most women actually desire testing in order to protect their babies, but unfortunately they often fear the stigma and rejection if they were to test HIV positive (MOHSS,2004).Therefore it is the responsibility of the staff at the antenatal clinics at all levels to provide information and support to pregnant women regarding their HIV status. This has the effect of de-stigmatizing HIV testing, which indirectly, reduces stigma of HIV in the health care setting.

2.5 Voluntary Counseling and HIV Testing.

When the HIV test was developed in the mid 1980s, testing tended to be accompanied by little HIV counseling. However, with the growing awareness of HIV infection and AIDS and the recent availability of antiretroviral therapy (ART), the scope of and reasons for Voluntary Counseling and HIV Testing have broadened. VCT is a process by which an individual undergoes counseling to enable her/him to make an informed decision about being tested for HIV, assess their personal risk for HIV and develop a risk reduction strategy. VCT services are essential components of HIV prevention and care programs. However, initially many people were reluctant to be tested if care and treatment were not offered (Stringer, et al. 2003). The social conceptualization and representation of HIV and HIV testing also have influence on HIV test uptake rates. For example, the association of HIV with immediate death and discrimination, belief that a person is outside the category of risk, lack of awareness or knowledge about rates in one's community, fear of being labeled and stigmatized by the significant others, perception of the consequences of living with HIV, user friendliness of testing sites, symptom driven health seeking , lack of knowledge about available treatment are some factors that have

been alleged to deter people from HIV testing (MOHSS,2004). UNAIDS, identified various approaches to VCT services which included, integration of VCT into antenatal care (ANC), integration of VCT into Primary Health Care (PHC) services, and into hospital settings and the private sectors.

2.6 Voluntary Counseling and HIV Testing as part of MTCT strategy

The World Health Organization (WHO) is promoting the pre-test initiative, which calls for HIV voluntary counseling as an entry point for access to care and prevention (Stringer, et al. 2003). Although globally, VCT services have been identified as an important strategy in managing HIV transmission from Mother to Child, VCT in PMTCT has not been seen as a priority in HIV care and prevention programs in many developing countries and has therefore not been widely available. In Namibia, VCT services have been identified as an important strategy in managing HIV transmission from Mother to Child (MOHSS, 2004). Zandile (2004) stated the rationale behind the VCT strategy as follows: VCT may lead to behavior change, thus contributing to the reduction of HIV transmission. VCT opens opportunities for the infected individual to access psychological support and care. VCT may also encourage pregnant women to live positively after receiving counseling. According to the WHO Health Services Coverage (2004) in 2003 the number of sites offering VCT in PMTCT services was 37,513 in the World, 13,214 in Sub-Saharan Africa and 2 in Namibia.. The percentage of adults receiving VCT in PMTCT services in Namibia in 2003 was 0.3% (MOHSS, 2004).

2.7 Uptake and acceptance of Voluntary Counseling and HIV Testing

In Thailand 98% of pregnant women accept HIV testing during the antenatal care visits. (Tapparo, J. 2006). A cross sectional survey was used in Bushenyi district, Uganda to estimate the proportion of pregnant women who undertake VCT found that thirty-eight (17%) of 219 people interviewed had ever undergone HIV testing. The factors influencing VCT for HIV were the consequences of a test result, influence of a sexual partner, the cost of VCT, physical accessibility of VCT, awareness and risk of HIV infection (Nuwaha, et al. 2002).

In a pilot study of same-day VCT in six urban antenatal clinics in Lusaka, Zambia, 84% of pregnant women requested testing and a quarter of those women tested positive (Preble, et al.2003). In Namibia, a very low uptake of VCT (< 10%) was recorded during the pilot PMTCT program and this was attributed primarily due to the lack of trained counselors in Namibia (MOHSS, 2004). This figure however gives an indication of low uptake of VCT in PMTCT by pregnant women in the country (MOHSS, 2002). These figures are increasing rapidly in both countries and Namibia now has 35% of VCT in PMTCT uptake among pregnant women in 2005 (MOHSS, 2006).

2.8 Factors that affect uptake and acceptability of VCT in PMTCT services

A number of varied and complex factors serve as barriers to the acceptance and uptake of VCT. They include both service and client-related factors.

2.8.1 Service-related factors

2.8.1.1 Accessibility and availability of VCT services

VCT has generally not been seen as a priority in HIV care and prevention programs. In many parts of the world, and particularly in developing countries, Voluntary Counseling and Confidential Testing (VCT) is not widely available or not available at all (MOHSS/NACOP, 27.Oct. 2003). The dearth of VCT centers in Namibia has meant that such services are largely unavailable to the poor, and mobile VCT services are not in practice yet. According to the WHO Health Service Coverage (2004) the percent of pregnant women offered VCT in PMTCT services in 2003 was 8% for the World, 5% for Sub-Saharan Africa and 1% for Namibia. Overall, there was a very low uptake of VCT (<10%) during the pilot PMTCT program primarily due to the lack of trained counselors in Namibia. In the area of VCT in PMTCT, problems are often experienced with follow up of mothers and babies due to lack of transport and shortage of staff. There is inadequate laboratory support for PMTCT programs and for patients on ARV therapy.

In many district, rapid tests have not been incorporated into the national HIV testing system to meet the demands of new advances in prevention and care program (MOHSS, 2004). Several key factors may contribute to the poor and inconsistent utilization of maternal health care services for PMTCT such as lack of transport, low income, unemployment and low educational level (MOHSS, 2004). In Namibia, return rates for HIV results are low (40-50% return rate in some region) due to inherent delays in availability of results at least two weeks or more (MOHSS, NCCM. 2002).

In a four-year study to examine the introduction of PMTCT services within maternal and child health programs in Kenya and Zambia, about two-thirds of more than 22,000

women who sought antenatal care as new clients received pretest counseling., but less than one-third went on to have an HIV test. Reasons for disapproving VCT uptake at ANC/PMTCT sites throughout Africa may include logistic barriers (e.g. results are unavailable the same day or tests are expensive) and fears that test results will not remain confidential. Even when women are tested, a substantial number do not return for their results (Cartoux, M.1998).

2.8.1.2. Confidentiality and attitude of health workers

Voluntary screening programs for HIV may be either confidential or anonymous: the process for each is unique (Stanhope, 2000). A qualitative study investigating VCT uptake by pregnant women using focus group discussion in South West Uganda revealed that pregnant women were anxious about taking up VCT, due to the fear for confidentiality and fear that maternity staff might refuse to assist them when the time come to deliver if their status were known (Pool, et al. 2001). It is alleged that in some health facilities nurses disclose the HIV status of their clients in the public without informed consent (Stanhope, 2000). In addition, patients are said not to accept being counseled by counselors who are younger than themselves, which increases the pressure on the availability of counseling services (MOHSS, 2004).

Several key factors may contribute to the poor and inconsistent utilization of maternal health care services for PMTCT such as stigma and fear for HIV positive pregnant women to disclose their status to health workers. On the other hand, the quality of care (good or

bad) received from a health facility during previous pregnancy or delivery can have an associated effect on her future utilization of the facility.

2.8.2 Client related factors

2.8.2.1 Knowledge, Attitude and Practice about HIV/AIDS and VCT

At least 90% of the 25.3 million people living with HIV/AIDS (PLWHA) in Sub-Saharan Africa do not know that they are HIV positive (WHO, HIV/AIDS. 2002). In a study conducted by Fauci (2001) among pregnant women in Southern India, the majority (86%) reported that they would agree to test for HIV. This group of women stated that they would consent to HIV testing in order to protect their unborn babies. On the other hand, women who stated that they would refuse to test said they either did not perceive themselves to be at risk for HIV or needed their husband's permission to undergo the test. A study conducted to assess pregnant women's knowledge of HIV and AIDS awareness and attitude towards VCT uptake in a Teaching Hospital in Northern Nigeria indicated that 65% had good knowledge, 24% had fair knowledge and 11% had poor knowledge of infection. Most respondents were aware of VCT through health workers, mass media and friends (Iliyasu, et al.2005). Another study carried out in Lagos, Nigeria indicates that the majority of women (89.9%) had good knowledge of the mode of HIV transmission, however specific aspects of PMTCT was poor. For example, close to half of the women (41.7%) were not aware of the association between breast milk and HIV transmission (Ekanem, et al. 2004). In Tanzania, self-efficiency regarding alternative feeding methods and religion were shown to be associated with willingness to accept VCT (de Paoli, et al. 2004).

2.8.2.2 Literacy and VCT in PMTCT

The majority of women in many developing countries are illiterate, which contributes to them not understanding health related problems. A pilot study investigated factors related to uptake and acceptability of VCT for HIV among pregnant women in Kigali, Rwanda, found that women whose partners had skilled and well paid jobs were about four times more likely to accept HIV testing, than were women whose partners were unemployed (adjusted O.R, 3.5; confidence intervals 1.16-10.85) (Kowalczyk, et al. 2002). In Namibia, information, education and communication messages for VCT/PMTCT designed in Windhoek are largely in English and are not suitable for many Namibians, who often can not easily read or understand English or for whom messages may not be culturally appropriate. As a result, leaflets, posters and billboards in English may turn to be quite ineffective. Few interventions have addressed the cultural and psychosocial determinants that are related to people's sexual risk taking and risk reducing behaviors (MOHSS, 2003). In Oshikoto region, Namibia, the unemployment rate is the highest in the country at 45% and fifty percent of the households are headed by women (MOHSS, 2002).

2.8.2.3 Discrimination and stigma

Stigma is largely driven by social and familial pressure “family name” (Khan, M.S.2000). For example, in some cases people living with HIV are given names by their relatives which are associated with their symptoms such as “that one with diarrhea or sores”. Stigma is also driven by some cultural or religious norms and value as well as by fear of AIDS and secrecy (Khan, M. S. 2000). A study conducted in

Nigeria to determine the acceptability of VCT among pregnant women indicated that fifty-three subjects gave informed consent to HIV testing. Five clients 9.4% did not turn up for their results and 3.8% consenters did not want to know their sero status. The reaction to disclosed results included grief 9 (28.1%), indifference 8 (25%), surprise 5 (15.6%), family concern 5 (15.6%), denial 3 (9.4%) and suicidal ideation 2 (6.3%). An average of 18 minutes per clients was spent on counseling (Isezuo, et al. 2004). In another study conducted in a Teaching hospital in Nigeria, most women were aware of VCT through health workers, mass media and friends. Similarly, most participants (81%) approved of VCT, (13%) disapproved of it and the remaining (6%) was undecided. The main reasons for disapproval were: fear for stigmatization, isolation and effect on marriage security (Iliyasu, et al.2005). Indeed, in Namibia where some 200,000 people are living with HIV, less than 200 people have openly disclosed their status (MOHSS, 2003). Many people with HIV are being discriminated against, once their HIV status is known, they can lose their jobs, friends, homes and even their families (Goosen, et al.1996). Studies and experience in some regions in Namibia have shown that most women actually desire testing in order to protect their babies, but unfortunately they often fear stigma and rejection if they were to test positive (MOHSS, 2004).

2.9 Conclusion

This chapter has covered a broad review of literature on factors affecting Voluntary Counseling and HIV Testing among pregnant women attending ANC services. It is clear that developing countries have a problem of low Voluntary Counseling and HIV Testing

uptake rate. The literature has also suggested that long distance, lack of trained counselors, fear for HIV results, stigma and discrimination, negative attitude of health workers, as well as, inaccessibility and availability of VCT/PMTCT are some of the barriers to the utilization of VCT/PMTCT services. Whilst there was limited information in the literature on Namibia literature, I have drawn on literature from comparable developing countries in Africa and Asia.

The next chapter focuses on the research methodology: Aims, objectives, definition of terms, study design, sampling, data collection and data analysis procedures, ethical consideration, validity, reliability, generalisability and limitations of the study.



CHAPTER 3 RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

The previous chapter summarized the literature related to factors affecting Voluntary Counseling and HIV Testing among pregnant women. This chapter presents the methodology of this study. According to Burns and Grove (1995), research methodology “refers to the strategy of the study, from identification to final data collection”. It contains the following; aims, objectives, definitions of terms, study type and design, study population, sampling, data collection tools, data processing and analysis, validity and reliability of the designed instruments, data management, generalisability, ethical considerations and limitations of the study.

3.2 Aim

To assess Voluntary Counseling and HIV Testing services and identify factors that contribute to the low uptake among pregnant women attending antenatal care services in public facilities in Tsumeb district.

3.3 Objectives

1. To assess the knowledge, attitudes and practices (KAP) of women regarding VCT in PMTCT services.
2. To determine the quality of counseling for VCT testing.
3. To identify barriers that prevents pregnant women from utilizing VCT in PMTCT services.

3.4 Definitions of terms used in the study.

Acquired Immunodeficiency Syndrome (AIDS) is the late and most advanced stage of HIV disease.

Confidentiality is a situation in which you trust someone not to tell secret or private information to anyone else.

Counseling is a confidential dialogue between a client and a counselor.

HIV testing is the obtaining of a bodily sample for the specific purpose or performing a medical test or a number of medical tests to determine the HIV status of a person.

Human Immunodeficiency Virus (HIV) is the virus that causes AIDS.

Mother to child transmission is a transmission of HIV from infected mothers to unborn babies which may occur during pregnancy, delivery or after delivery during breastfeeding.

Post-test counseling is the counseling provided when an individual receives his or her HIV test results as well as giving moral support immediately after the client has received the result.

Pregnant woman is a woman who is having an unborn baby growing inside her body.

Pre-test counseling is the counseling given to an individual before an HIV test is performed to make sure that the individual has sufficient information to make an informed decision about having an HIV test.

Voluntary counseling and testing (VCT) is a process by which an individual undergoes counseling to enable them to make an informed decision about being tested for HIV, assess their personal risk for HIV and develop a risk reduction strategy.

3.5 Study design.

A descriptive cross-sectional study design using quantitative and qualitative methods was used to collect data from pregnant women on Voluntary Counseling and HIV Testing services. Quantitative research relies upon measurement to analyze different variables and uses various scales (Bless & Higson Smith, 2000). This is a formal objective, systematic process, which aims to describe, compare and analyze different variables. The quantitative research approach was considered to be appropriate for this study because it allows a formal and systematic approach to collect information on pregnant women's knowledge, attitude and practices about HIV and VCT in PMTCT and documents descriptions of the barriers that prevent pregnant women from utilizing the VCT in PMTCT services and the quality of counseling for VCT services.

3.6 Study population

A study population is the entire accessible group of persons that is of interest to the researcher or that meets the criteria the researcher is interested in studying (Brink, 2002). The study area was Tsumeb Health district in Oshikoto region of Namibia. The population in this study was pregnant women of childbearing age (15-49 years). The target population was all the pregnant women who used ANC services in three public sector clinics in Tsumeb district, namely Tsumeb clinic, Lombard clinic and Oshivelo clinic. The nurse in charge of each clinic assisted the researcher to identify the participants. Tsumeb district had a total number of 6, 056 women of childbearing age according to the district annual health information statistic for 2004.

The inclusion criteria were:

- Pregnant women aged 15-49 years.
- Speak local language (Oshiwambo, Afrikaans or English).
- Attending ANC clinics in public sector.

The exclusion criteria were:

- San population (most of whom do not speak English, Oshiwambo or Afrikaans).

3.7 Sampling

Sampling is the process of selecting a portion of the population to represent the entire population; it is then a subset of the population (Denise, et al. 2001). Bless, et al. (2000) state that sampling should be done because it is less time consuming and less costly for the researcher to work on a subset of the population. In this study, four clinics in Tsumeb district were sampled because their ANC and VCT services were integrated. Other ANC clinics in Onandjokwe district only provide health education about PMTCT and refer clients to the hospital for counseling due to the condition of the clinics and the distance to the laboratory services.

The sampling base was selected from ANC clinics providing VCT in PMTCT and that were reported to be fully operational since the introduction of the PMTCT program since August 2004. In order to ensure a representative sample in a particular district, two sites were chosen from an urban area and two from a rural area. A total of three clinics, Tsumeb, Lombard and Oshivelo clinics were finally selected because Tsintsabis clinic (one of the rural sites) were found to be non-functional at the time of research. The San population was excluded because most do not speak English, Oshiwambo or Afrikaans.

Tsumeb and Lombard clinics were in urban area while Oshivelo clinic was in rural area. These three clinics were identified as the best clinics among the four in public sector providing VCT in PMTCT during ANC since the introduction of the program because of good antenatal attendance. Each clinic conducts ANC twice a week, the first day for new clients and the second day for follow-up visits. During the first visit, all the ANC patients are provided with ANC records. The service is commenced with health education and the introduction of the VCT/PMTCT program in group counseling. After the group counseling, the counselors continue with individual counseling for those who consent to be tested for HIV on the same day. Some chose to get tested on a future clinic visit. A convenience sampling method was used to select pregnant women who attended the three chosen clinics providing integrated ANC and VCT/PMTCT services in the Tsumeb district.

From the 12th April to 15th June 2006, the researcher went to Oshivelo, Tsumeb and Lombard clinics on the ANC '1st visit' and 'follow-up visit' days to conduct the interviews with pregnant women. The sister in charge of each clinic identified all the women who came to attend ANC clinics. During the health education session and after group counseling on VCT/PMTCT, the researcher introduced herself to the women and requested them to stay for the research. Women were referred to the researcher in the office of the sister in charge where she explained about the research to them in own language and then asked permission to conduct individual interviews. The participants gave written consent before the interviews commenced. A number of women were given appointment dates and time in the following week because they were not able to wait for the interview on the same day.

The sample size should be decided in a way that it is representative and can be generalized to the population (Denise, et al. 2001). One hundred and fifty (150) pregnant women were conveniently sampled to provide information on the study questions. The interview was conducted for both of the pregnant women who consent to HIV testing and those who did not consent to have an HIV test on the same day. A total of 120 pregnant women were taken from Lombard (40%), Tsumeb (40%) clinics and thirty (20%) subjects were taken from Oshivelo clinic. In the proposal, it was proposed to interview 100 participants from Tsumeb and Lombard clinics (33.3%), and 50 from Oshivelo and Tsintsabis clinics (25 each). The difference in sample size was, because Tsumeb and Lombard clinics are in urban areas where the ANC attendance is high compared to the clinics in rural area. During data collection it was discovered that it would not be possible to include Tsintsabis clinic due to very low ANC client numbers and the numbers interviewed from Oshivelo, the other rural clinic, were increased to 30 to try to compensate for the loss of one rural clinic site in the study.

3.8 Data collection tool

The research instrument is the devise that a researcher uses to collect data (Denise et. al. 2001). The researcher designed structured questionnaires that were used to be administered during face to face interviews to collect data from the study participants. Some of the questions were adapted from the National Report on the Assessment of the Public Sector's Voluntary Counseling and Testing Program. Title: National Voluntary Counseling and HIV Testing Program Assessment Report (Bongani et. al. (2002). Other questions were developed by the researcher herself, assisted by the supervisor. The

questionnaire consisted of open and close ended questions with enough flexibility to allow new issues to be raised. The section on demographic data of the participants included age, marital status, educational level, employment, and distance to the clinic. These were included to obtain a general view of the participants' social characteristics. The major section contained open and closed ended questions on knowledge, attitude, practice to HIV and VCT/PMTCT services; quality of counseling for VCT testing and barriers that prevent pregnant women from utilizing VCT services. The questionnaire was designed after the literature review, and it was done in order to meet the purpose and objectives of the study. Questions were formulated in simple words and it was administered in the preferred language of the study participants.

3.9 Data collection method

Data collection is the gathering or collection of information needed to address a research problem (Denise, et al. 2001).

Data was collected between 12th April and 15th June 2006 at Tsumeb clinic, Lombard clinic and Oshivelo clinic in Tsumeb district, Oshikoto region, Namibia. Face to face interviews method was used to collect information.

The researcher made an appointment with the sister in charge of the clinics to visit the facilities on ANC clinic days. The researcher explained the content of the questionnaire to participants during interviews and completed the questionnaire herself. The researcher was assisted by a research assistant who is the PMTCT coordinator for Tsumeb district during her visits at Lombard and Oshivelo clinics.

All the interviews were conducted after informed consent has been obtained from the interviewers. The questionnaires were administered to pregnant women after pre-test counseling, if they did not consent to HIV testing on the same day and after post-test counseling for those who have testing for HIV.

Each of the clinics was visited for between five (5) to seven (7) days due to poor ANC attendance during the initial and follow-up visits. A total of four (4) to eleven (11) questionnaires were completed per day. Data collection continued until a total of one hundred and fifty (150) questionnaires were completed as planned in the study proposal.

3.10 Data Processing and Analysis

Data analysis is the process of organizing and synthesizing data in such a way that research questions can be answered and hypothesis can be tested (Denise, et al. 2001). Data analysis thus entails categorizing, ordering, manipulating and summarizing the data and describing them in meaningful term (Brink, 1996). Analyzing of the data should start while collecting the data, in order to address the unclear issues before the data collection is over (Varkevisser, et al. 1991).

In this case, data quality control and cleaning commenced in the field by the researcher ensuring that all the information on the questionnaires had been properly collected and recorded and checked for completeness of data and internal consistency. Data analysis started once all the data has been captured. Closed-ended questions were analyzed using nominal scales into mutually exclusive categories and frequencies. Open-ended questions were analyzed using post-coding prior to entering data. Epi-Info was used to analyze the data. Actual narrative was included in the report to provide context. Analysis involved

the production and interpretation of frequencies counts, tables and graphs that describe and summarise the data.

3.11 Validity and Reliability

Validity is the degree to which an instrument measures what it is intended to measure (Denise, et al. 2001). The questionnaire was pre-tested in the maternity ward among prenatal women. Since they were not going to participate in the study but would have attended the ANC in Tsumeb district. Components assessed during the pretest included; knowledge, attitudes and practices toward HIV/AIDS and VCT as well as quality of pre and post-test counseling. Pre-testing was done to determine whether the questions were clear, unambiguous and could be understood by the participants. Ten questionnaires were pre-tested, but no changes were made. To test content validity the questionnaire was also revised by my supervisor at the University of the Western Cape with critical comments.

Reliability refers to the degree of consistency or accuracy with which an instrument measures the attribute it is designed to measure (Denise, et al. 2001). Reliability refers also to the degree of similarity of the information obtained when the measurement is repeated on the same subject or the same group. Is the same value arrived at every time the measurement is taken, or do the values vary a lot on repeated administration? (Katzenellenbogen, et al. 1997). The same questionnaires were used in all the clinics during the interviews and all its subparts were measured using the same characteristic.

3.12 Data management

Immediately after the interview, the researcher checked the questionnaire for completeness and followed up any queries. Closed-ended questions were coded and processed using Epi-info. Answers to open-ended questions were post-coded before processing the data using Epi-info. The reliability of the study was increased by means of cleaning data using initial frequencies and looking for missing and out of range values.

3.13 Generalisability

In order to infer generalisability of a sample to the population, Burns and Grove (2001) indicate that there should be a response rate of >50%. The response rate achieved in this study was of 100% of pregnant women attending ANC services at public sector in Tsumeb district, so I infer that the result could be generalized to pregnant women attending similar clinics in Namibia. The sample size was 150 pregnant women attending ANC in public sectors.

3.14 Ethical Consideration

Written permission to conduct the study was granted from the Permanent Secretary of the Ministry of Health and Social Services through the Directorate: Policy, Planning and Human Resources Development (HRD), subdivision: Management Information and Research. The research protocol and consent form were also approved by the University of the Western Cape Ethics Committee.

The aim of the study was explained to all the potential participants. Permission to include them in the study was sought and written consent was obtained. The participants were informed that they were free to withdraw at any time without giving reasons. A decision not to participate was strictly respected and women assured that non-participation would not affect their health care in any way. Strict confidentiality and privacy was ensured and maintained throughout the study. In addition, researcher has information on cross-cultural studies and knows the community's local culture and beliefs. The procedure was conducted in such a way that no harm was caused to the participants. All information concerning individual subject will remain anonymous and confidential.

3.15 Limitations of the study

The research was conducted in the three public sector antenatal care clinics in Tsumeb district which were found to be fully operational and providing VCT/PMTCT at the time of research, namely Tsumeb, Lombard and Oshivelo clinic. Tsintsabis clinic was not included in the study as has originally been intended for the following reasons. Tsintsabis clinic was visited on antenatal clinic days and appointments were done timeously, but there were no pregnant women who came to attend ANC services on the days visited.

Analysis of the attendance register at Tsintsabis clinic indicated that in some months only 2-3 women visited the clinic for ANC purposes. Secondly, Tsintsabis clinic is located in an area inhabited mainly by San people who speak their mother language. It is estimated that the majority of San people (approximately 80%) do not understand other local languages and so due to communication problems they would be excluded from the

study. It is important to note, therefore, that the San group largely was excluded from the study. Furthermore, the sample included only 20% (30 out of 150) participants from the rural clinic so this is also an important limitation of the study.

Pregnant women who do not attending ANC services or using the private sectors were excluded from the study. Pregnant woman who cannot understand English, Afrikaans and local languages were also excluded - this related to mostly the San people who were largely excluded from the study as indicated above.

There was a possibility of social acceptability bias in response due to the fact that the district coordinator was the research assistant for the study and the researcher was also known to be a health worker. Mothers may not have felt free to share negative experience about the program in the presence of a senior health manger. However as the discussion progressed, they appeared to relax and were talked freely with the researcher.

3.16 Conclusion

This chapter dealt with the research methodology employed in the study. Quantitative research formed the basis of this study. Information was provided about the population, sampling, data collection and data analysis. The next chapter will deal with the results of the study.



CHAPTER 4 RESULTS

The previous chapter dealt with the research design and methodology. This chapter presents the findings of the study.

4.1 INTRODUCTION

The interviews were conducted between 12th April and 15th June 2006. All participants selected met the inclusion criteria which were:

- Women aged 15-49 years
- Speak one of local language (Oshiwambo, Afrikaans or English).
- Attend antenatal care clinics in public sectors primary care clinic.

The participants were conveniently sampled when they attended ANC at Tsumeb, Oshivelo or Lombard clinic. The results are presented in four major sections: Demographic profile of participants; Knowledge about HIV and VCT in PMTCT services; Attitudes and practices towards HIV and VCT services, and finally, Quality of VCT services provided including pre and post-test counseling.

4.2 Demographic profile of study participants

All 150 participants were pregnant women attending ANC at Oshivelo, Tsumeb or Lombard primary level clinics in public sector. The numbers of participants interviewed from each clinic were as follows-

Tsumeb clinic (60), Lombard clinic (60) and Oshivelo clinic (30).

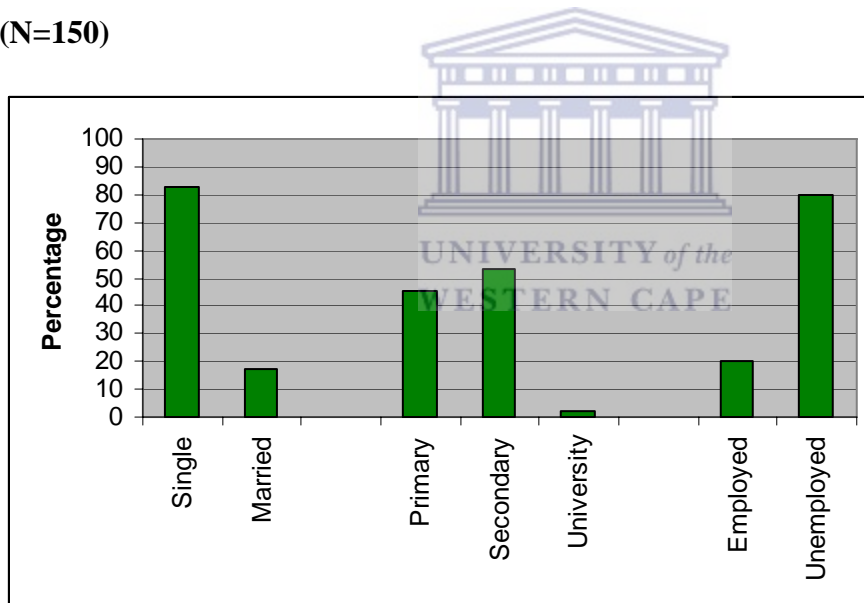
Table 4.1 Age distribution of study participants (N=150)

Age (years)	N	(%)
<15-20	32	(21%)
21-30	79	(53%)
31-40	39	(26%)
41-49+	0	(0%)

Just over half (53%) of the study participants were between 21-30 years while none of the participants were over 40 years of age.

Figure 4.1 Marital status, educational level and employment status of participants

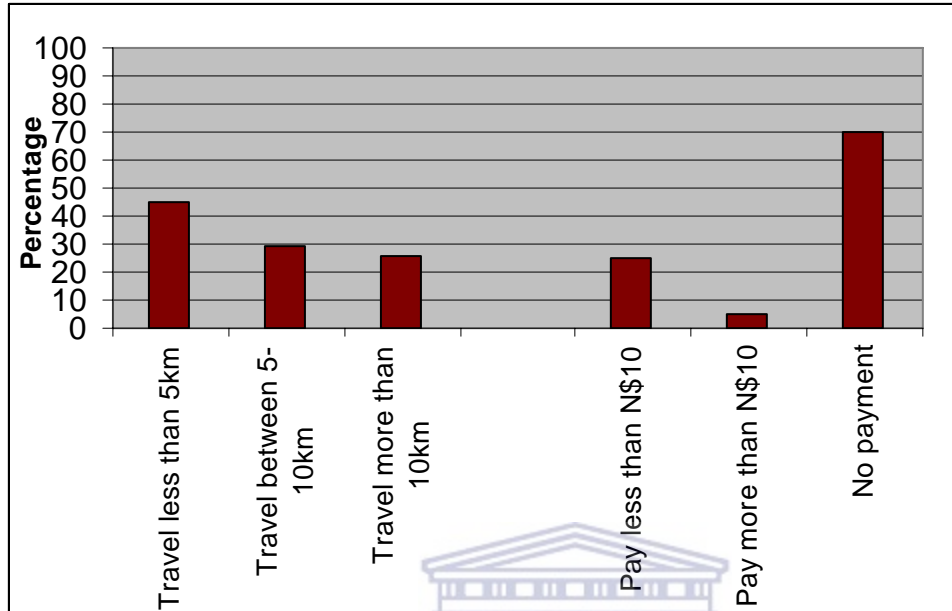
(N=150)



It can be seen from figure 4.1 that the vast majority of the participants were single, unemployed and have a primary or secondary level of education.

4.2.1 Accessibility of clinics.

Figure 4.2 Distance and cost of travel to clinics incurred by participants (N=150)



Almost half of the participants 67 (45%) traveled less than 5km from home to the clinic, whilst 39 (26%) said they travel more than 10km.

The vast majority do not incur any transport costs and only 37 (5%) said they paid more than N\$ 10.00 for the trip.

4.3 Knowledge regarding HIV and VCT in PMTCT services.

4.3.1 Methods of HIV transmission and protection.

Figure 4.3. Methods of HIV transmission identified by participants (N=150).

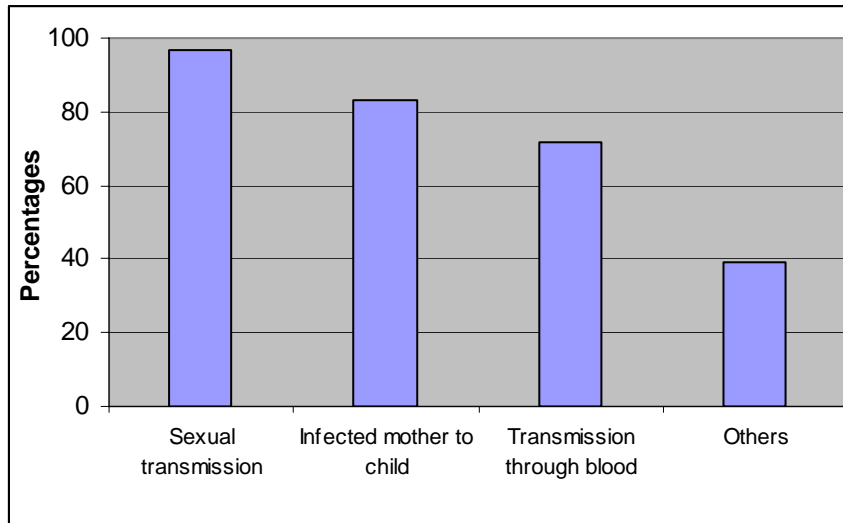
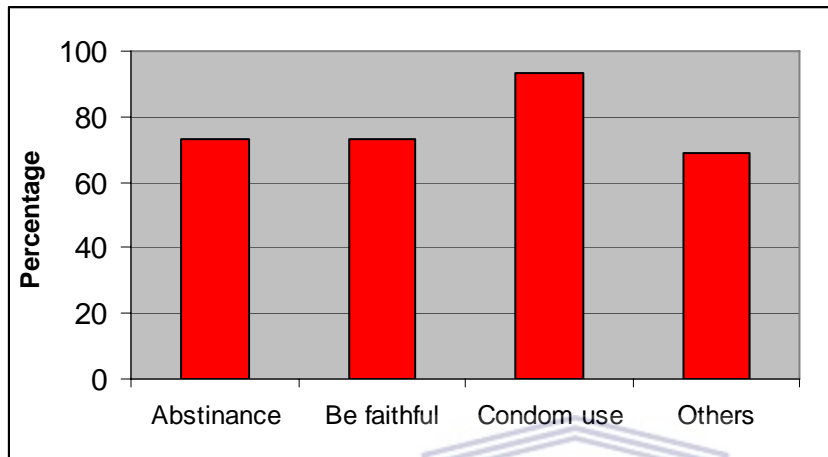


Figure 4.3 shows that participants had a good understanding of how a person can contract HIV. Out of one hundred fifty participants, 145 (97%) identified the risk of contracting HIV as associated with sexual transmission and 124 (83%) infected from mother to child. Fifty nine (39, 3%) of the participants mentioned any other methods of HIV transmission.

Those mentioned included the following; 31 (21%) participants said if a person having an open wound and coming into contact or touching an infected blood during accidents; delivery or cleaning of wounds or sores; 24 (16%) said if someone shares unsterile scissors or blades with an infected person or contaminated needles like drug users; 2 (1.3%) mentioned needle prick, such as in hospital whereby a needle is used to inject a HIV-positive person can cause infection and lastly, 2 (1.3%) said when an HIV positive person is having bleeding sores on lips and kisses others.

Ninety one (61%) of participants did not specify any other ways of HIV transmission.

Figure 4.4 Methods of protection against getting HIV identified by participants (N=150).



The majority of participants 138 (93%) identified condom use as a way of protection against HIV infection.

One hundred and three (69%) of participants mentioned other ways of protection against getting HIV, such as, the importance of always using new or sterile blades, scissors or needles: always coverings wounds, and using gloves during deliveries, cleaning wounds/sores and during accidents to prevent infection.

Figure 4.5 Methods of transmission of HIV to unborn baby identified by participants (N=150)

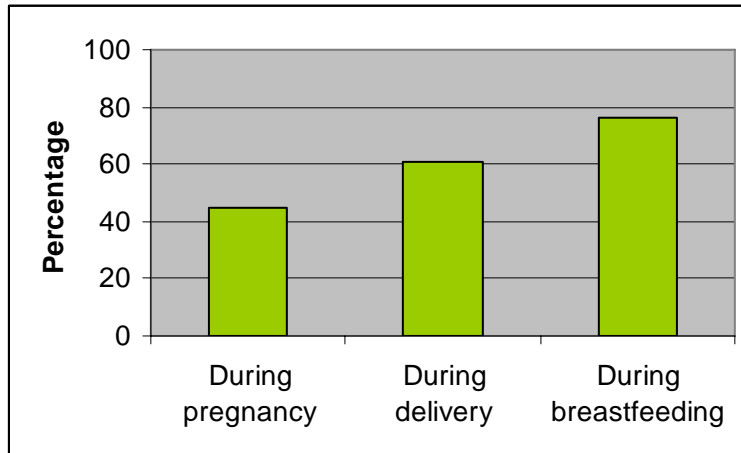


Figure 4.5 indicates that the majority of participants 114 (76%) were aware that HIV positive woman can transmit the virus to her baby during breastfeeding and 61% during delivery, but fewer mentioned transmission during pregnancy.

4.3.2 Information about VCT in PMTCT services.

Table 4.2 Sources of information on VCT in PMTCT identified by participants

(N=150)

Source	N	(%)
Clinic	143	(95%)
Family members	104	(69%)
Newspaper	61	(41%)
Radio	50	(33%)
Television	61	(41%)

Table 4.2 illustrates that the most common source of information on VCT in PMTCT, mentioned by 95% of the participants, was at the clinic during the previous clinic visits.

Other sources mentioned that are not listed included non- governmental organizations, conducting awareness meetings on HIV in villages and schools. As one participant has explained, *“I heard about this program in the meeting conducted at Rundu Leevi Senior Secondary School by the Kavango Bridge of Hope”*.

4.3.3 The VCT and HIV services available at the clinic.

Figure 4.6 Available VCT services identified by participants (N=150)

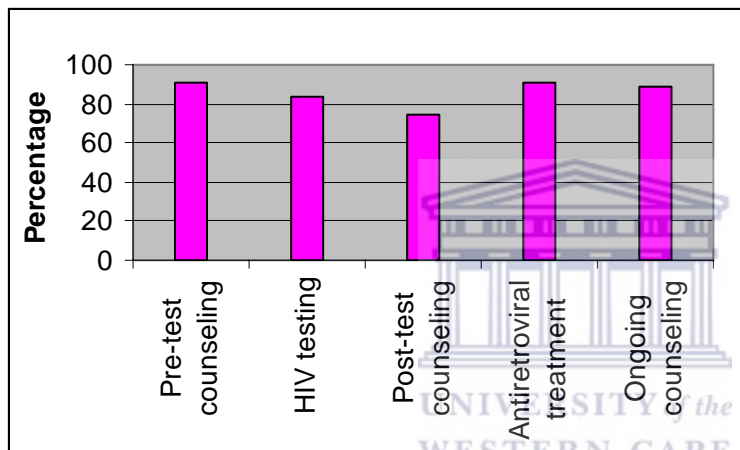


Figure 4.6 indicates that most participants were aware of the range of HIV and VCT services offered at the clinic.

4.4 Attitudes and practices to HIV and VCT services

4.4.1 The benefits and fears of having an HIV test.

When asked what are the main benefits of having an HIV test, 71 (47%) of participants said the benefits included the importance of and relief associated with knowing one’s HIV status; 44 (29%) the ability to live a better life or live positively after testing,

including protecting oneself and partners; 48 (32%) said accessing health care and to get ARV treatment during delivery or to prolong the life; accessing other available resources, and being able to plan for one's future. They also said it helped them to change risky behaviors and prevent the spread of the HIV. Comments from some clients who did not see any benefits in taking an HIV test were: *"I am going to die anyway"; I don't think it is necessary to know one's status, you think about death always"; "it is not okay to know that I am sick"*. Fears of clients about testing were similar to the reasons that made them to decide not to get their results. Seventy-seven (51%) stated that they feared death and dying and that people think if they are HIV positive they will die soon, and that they would not be able to cope once they are diagnosed as HIV positive. Eighty (53%) said they are afraid to feel pain and to cope with the knowledge that they are HIV-positive. *"It is not easy to disclose your status to your partner, families or friends"*. Sixty-four (43%) participants said that they fear they will be stigmatized, rejected and discriminated by the family and community if HIV-positive. Participants said that having HIV is too embarrassing because others will label you as a prostitute or having multiple sexual partners. Twenty-four (16%) said that HIV positive results cause stress and *"bad feelings to commit suicide"*. *"However, it is the fact that AIDS are not curable and it kills"*. One participant said *"it is better to end my life, because there is no better future or life if HIV positive, just suffering, illness and poverty"*. In addition, 7 (5%) do not trust health

4.4.2 Integration of VCT into PMTCT services and counseling of partner.

The majority of participants (99%) indicated that VCT should be part of PMTCT service, and that it is necessary to invite partners for counseling.

4.4.3 Benefits of pregnant women taking up VCT in PMTCT services and counseling.

The majority of participants 118 (79%) said that they benefit from taking up VCT in PMTCT services because, when they are found to be HIV positive and enrolled into PMTCT program, their babies will be protected from more HIV transmission during delivery by using antiretroviral drugs, like nevirapine. When asked what are the benefits of counseling 84 (56%) of participants said counseling would make them feel more comfortable, accept the results, release stress and anxiety and help people to change their behaviors and live positively. Thirty (20%) said that during counseling sessions the counselors gave clear information about the dangers of HIV, and information on protection and prevention.

One participant said *“I was very depressed when I realized that I am pregnant, only thinking of HIV infection, dying and death, I have tried to take overdose, is better to die before knowing that I am HIV-positive, but after good counseling I was released and take the right decision to have a test and get nevirapine during delivery if HIV positive. I am now feeling positive and will take care of myself”*. Comments from those who said the counseling had influenced their decision were: *“I was given more information on HIV and AIDS, which enabled me to make a decision on taking the HIV test”*. One participant said that after counseling she felt able to take the test without being afraid, and was taught that being HIV positive is not the end of her life. The same participant said counseling had made her strong for the outcome of the results. However, one participant said *“I could still make my own choice without counseling: I do not want to know if I am sick”*. Another said *“They did not help me because they did not give me what I needed”*.

4.4.4 The general attitude of the community towards people living with HIV/AIDS.

Participants felt the attitude of the community towards people living with HIV was mixed. Seventy five (50%) of participants said that the attitudes of people are positive. Participant said that in many cases the community accepts HIV positive people; they are sympathetic and advise them to eat healthy. They provide care, support, counseling to them and continue their relationships with them and treat them like other people.

Participants said that some community members join home based care programs and assist those who are suffering from HIV with clothing, food and provide emotional and spiritual support.

One hundred thirty one (87%) participants said that the attitude of the community was negative and people fear that they will contract the virus. *“People are isolated, rejected and discriminated against; they gossip, laugh at and accuse people living with HIV as were looking for the disease”*. Participant said that some people don't want to be associated with HIV-positive people, as they see them as people who sleep around and they speak badly about them. Participants revealed that some HIV positive people are even physically abused by beating with the result that some are in such despair that they commit suicide.

4.5 Quality of pre and post test counselling services.

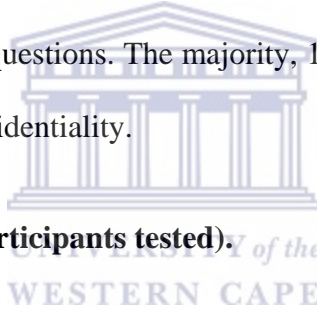
4.5.1 Pre-test counseling session

4.5.1.1 Subjects covered

Table 4.3 Subjects discussed with the counselor including pre-test counseling session (N=150)

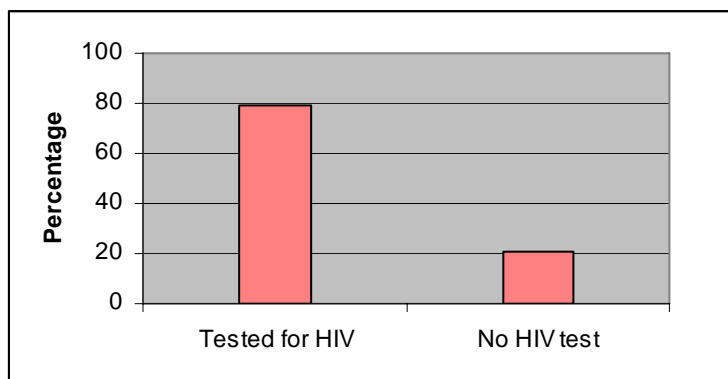
Subject	Number	(%)
Prevention of HIV	139	(93%)
Taking an HIV test	139	(93%)
About HIV results	137	(91%)
Enrolling in special program	134	(89%)
Ongoing counseling	127	(85%)

It is evident that the key subjects on HIV and VCT listed above were covered in almost all the pre-test counseling sessions. During pre-test counseling, 147 (98%) of participants understood pre-test counseling, 140 (93%) were able to ask questions and also understood the answer to their questions. The majority, 135 (90%) said that they received an explanation about test's confidentiality.



4.5.1.2 Uptake of HIV test (participants tested).

Figure 4.7 Participants tested or not tested for HIV.



As can be seen from figure 4.7 most participants were tested for HIV. All participants (100%) who were not tested said they are willing to be tested during the next visit to the clinic or sometime in the future. All one hundred and fifty (100%) of the participants

said they were asked or told to come back for another visit.

4.5.1.3 Factors influencing participants to have an HIV test.

Almost 120 (80%) of women reported having been tested for HIV. The reasons why they had decided to be tested included; *“I want to know my HIV status because I have engaged in unprotected sex and fell pregnant”*, *“I want to be given nevirapine if HIV positive”*. Twenty six (17%) participants said they got the information during group counseling about HIV transmission, protection and the importance of having an HIV test. One participant said *“I heard nurses talking about it and decided to have a test”*; *“I don’t trust my partner because he is having multiple partners; I was sick and did not know the cause of my illness”*. Thirty one (21%) women who decided not to get tested, said that they planned to have themselves tested during the next visit to clinic or sometime in the future. The reasons given for not testing on the day included: fear to be tested positive, don’t want to know my status now, *“my behavior is good so there is no need for me to test”*, fear for stigma, fear for losing the loved one/partner. One participant said, *“I don’t want people to look at me differently”*.

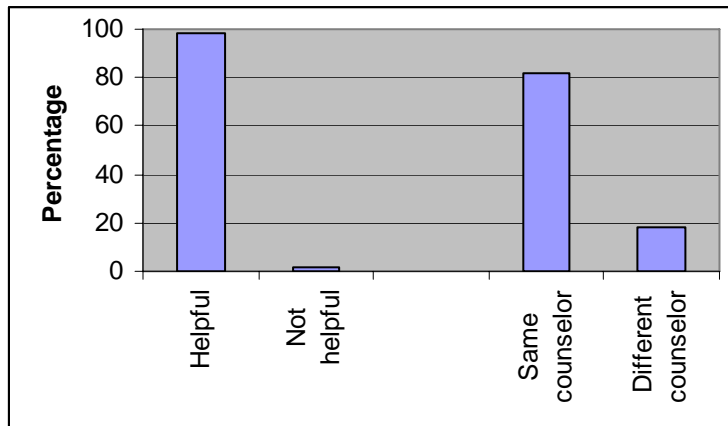
4.5.2 Post-test counseling.

4.5.2.1 HIV results.

The majority of participants (76.5%) who were tested for HIV got their results, while few did not get their results.

4.5.2.2 Quality of Counseling

Figure 4.8 Response to post-test counseling (N=150)



According to figure 4.8, the majority of participants (98.3%) found post-test counseling helpful and (81.5%) were seen by the same counselor. Reasons for finding post-test counseling helpful included it's educative and informative value, the empowering and coping mechanisms that the sessions provided and that they were comforted. Those who reported that their post-test counseling session was unhelpful said they felt that there were issues that were not resolved during the counseling session.

4.5.2.3 Counselors

Table 4.4 Type of VCT counselors preferred (N=150)

Type of counselor	Number	(%)
Anyone	97	(65%)
Female	25	(17%)
Male	6	(4%)
Somebody older than you	47	(31%)

Participants were asked if they had a preference for a specific type of counselors. Out of one hundred fifty, many were happy to be counseled by anyone, although almost one third said they would prefer somebody older than themselves.

4.5.2.4 Same counselor.

Many women confirmed that the same person had counseled them on subsequent visits. Few women reported being counseled by a different person on their previous visits. When asked how they felt about seeing a different counselor, they mentioned it caused lack of trust, confidentiality and discomfort, while some said it did not make a difference. Views of clients who minded seeing different counselor included: *“it was bad because the first counselor knew my case and I feel very uncomfortable with another person”*. Participants said that they felt unhappy that a number of people knew their status and felt that seeing one person ensured confidentiality. *“I am not sure about confidentiality, so I feel I am not free to say what I wanted to say. Another participant said “I feel very confused because I have been given different information to that of my pervious counselors”*. Some participants did not mind seeing different counselor, one said: *“I am very satisfied because I got the same approach from the new counselor”*, another said *“It was fine with me because I heard different views about myself”*.

4.5.2.5 Satisfaction with counseling and privacy.

Many of the participants (58%) were satisfied compared to (40%) who were very satisfied and few (2%) were unsatisfied.

4.5.2.6 Total time at clinic.

Table 4.5. Total time participants reported spending at clinic this visit (N=112)

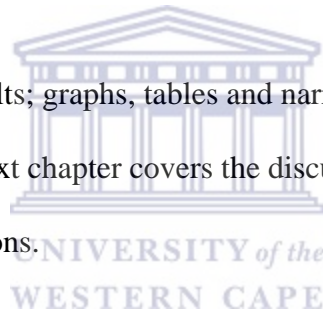
Length of time at clinic	No	(%)
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< 30 minutes	37	(25%)
30- 60 minutes	47	(31%)
60 – 2 hours	17	(11%)
2 -4 hours	8	(5%)
More than 4 hours	3	(2%)

Table 4.5 shows that the majority of participants spent 30-60 minutes at the clinic, although a small number spend over 2 hours at the clinic. It should be noted that only participants who took up the HIV test and attended the post-test counseling were asked this question. Those who did not take up the test and attend post-test counseling would almost certainly have spent a shorter time at the clinic.

4.6 Conclusion

This chapter was about the results; graphs, tables and narratives were used to describe the findings from the study. The next chapter covers the discussion of the findings, conclusions and recommendations.



CHAPTER 5 DISCUSSION, CONCLUSIONS AND RECOMENDATIONS

The previous chapter dealt with the results of the study. This chapter discusses the major research findings and places them in the literature. Conclusions and recommendations are then drawn from the main issues arising from the study.

5.1 Discussion

5.1.1 Introduction

The purpose of this study was to describe the reasons for the low VCT uptake rate among pregnant women attending antenatal care services in public health facilities in Tsumeb district, Oshikoto region, Namibia. The study was commenced because during the pilot PMTCT program carried out in 2002 in Namibia, there was a very low uptake of VCT (<10%) (MOHSS, 2004). When the PMTCT program was subsequently introduced in Tsumeb district in 2004; it was found that only 15% of the total population of women of childbearing age had utilized the VCT/PMTCT services (MOHSS,2004). Some of the key reasons identified for low uptake in Namibia included the lack of trained counselors (MOHSS, 2004) and the low return rates for HIV results (only 40-50% return rate in some region) which was due to inherent delays in availability of results by two weeks or more (MOHSS, NCCM.2002). Some aspects of the VCT service, such as the performance of the counselors, were expected, from previous literature, to play a significant role in VCT uptake and this aspect formed a significant component of the study questionnaire. The introduction in 2006 of the rapid HIV test in two clinics in the District, Lombard and Tsumeb clinics, which allows for the participants to be tested and receive their results on the same day, was also likely to have an impact on the study

findings. In contrast to the expected outcome, this study found that the uptake of voluntary counseling and HIV testing in PMTCT by pregnant women was high across all three study sites- 79% participants tested for HIV and 76.5% of these received their HIV results.

Some reasons for this unexpected result are due to the continued developments in the provision of the VCT services in the Tsumeb District where the study was conducted.

Recent service improvements have included (MOHSS, 2006):

- PMTCT program was rolled out to all public sector clinics in the district.
- Health workers and community counselors trained in VCT/PMTCT program and posted at every clinic.
- Rapid test available at some clinics.
- The health education and group counseling session providing information on HIV and VCT in PMTCT conducted at every clinic.
- District PMTCT coordinator appointed to provide support and conduct supervisory visits at the clinics.

Oshivelo and Tsintsabis clinic are still using the Elisa test resulting in continued time delay in the return of the results at these clinic.

5.1.2 Demographic data

One hundred and fifty pregnant women aged between <15-49+ years participated in this study. The majority of the participants, 79 (53%) were in the age group of 21-31 years, while <15-20 years made up 23%. The data was collected from participants attending following three public clinics namely, Tsumeb 60 (40%), Lombard 60 (40%) and Oshivelo clinic 30 (20%) in the Tsumeb district. In this study (83%) of the participants

are single and this contrasts with the Ministry of Health Report which found that 50% of the households in Oshikoto region are headed by women (MOHSS, 2004). It is also reported that in Oshikoto region, 16% of the children under fifteen years have lost either one or both parents due to HIV (MOHSS, 2004).

This study found that most participants had attended primary and secondary school and only one (1%) of the participants was schooling at the time of the study. According to LeBeau, D. et al. (2003), enrollment rate in Namibia is very high with over 90% of eligible children attending primary and secondary school. It is widely known, however, that many children drop out of school due to either financial constraints, poverty or due to teenage pregnancy (MOHSS, 2004). This situation contrasts with many developing countries in which the majority of women are illiterate and this contributes to them not understanding health related problems (Kowalczyk, et al.2002). Having said this, local research indicated that the information, education and communication messages for VCT/PMTCT designed in Windhoek are largely in English and are not suitable for many Namibians, who often can not easily read or understand English or for whom messages may not be culturally appropriate (MOHSS, 2003).

The majority of the participants were unemployed and it is known that Oshikoto region has the highest rate of unemployment in the country largely due to the fact that (91%) of the population live in rural areas (MOHSS, 2004). Most of the participants in this study lived near the clinics and did not incur any transport costs, only (5%) said they paid more than N\$10.00 to travel to the clinic.

This indicated that the VCT/PMTCT services are available and accessible to these particular clients, although of course, we cannot comment on the situation of those who

did not attend the clinic services. The literature indicated that in many parts of the world and particularly in developing countries VCT/PMTCT is either not widely available or not available at all (MOHSS/NACOP, 27 Oct 2003). The dearth of VCT centers in Namibia has meant that such services are unavailable to the poor and mobile VCT is not in place. As a result, it was reported that in 2003, the percentage of adults receiving VCT in PMTCT in Namibia was 0.3% (MOHSS, 2004). Neighboring countries recorded better results. Health System Trust estimated that as many as 15% of pregnant women in South Africa may have access to PMTCT services by the end of June 2002 (Bridget, 2002) and according to the Sentinel Surveillance study in Botswana (2005), 73% of pregnant HIV positive women were receiving PMTCT (Botswana Child monitor bulletin, 2005). In Namibia, the primary intervention to integrate PMTCT service within the normal health care delivery system commenced in March 2002 and rolled out to cover the entire country in 2004 (MOHSS, 2004). In the same year 2004, the service has been expanded to the Catholic services, Lutheran medical services and to 13 additional state hospitals (MOHSS, 2004).

Current information indicated that Namibia still faces considerable challenges ahead of them if they are to meet the third medium term plan (MTP III. 2004-2009) which states that (90%) of HIV pregnant women, partners and their babies should have access to VCT in PMTCT plus services. In addition there are several key factors that have been identified which may contribute to the poor and inconsistent utilization of maternal health care services for PMTCT including low income, unemployment, low educational level and distance to the facility (MOHSS, 2004).

5.1.3 Knowledge, attitudes and practices of HIV and VCT services.

This study has found that the majority of participants had a good knowledge of HIV transmission and protection. They viewed the risk of contracting HIV/AIDS as being associated with both sexual transmission and from infected Mother to Child. This is in line with the literature which indicated that “globally sexual transmission is responsible for 70-80% of all HIV transmission, blood transfusion 3-5%, injected drug user 5-10% and health care <0.01% (Ballard, et al.2000). The World Health Organization (WHO) estimated that the rates of MTCT of HIV ranged from 13% - 32% in developed countries and between 25% - 48% in developing countries (MOHSS, 2004). Without treatment, the rate of transmission during pregnancy ranges from 5-10 percent, during labor and delivery from 5-20% and during breastfeeding 10-20% (Bradford, M.2004).

In 2002 Baseline study in Namibia, 99.4% in the study population had heard of HIV or AIDS, about three-quarter (74.6%) of those who had heard of HIV or AIDS indicated that they knew someone who was infected with HIV or who had died of AIDS (MOHSS, 2002). In a study by Fitzgerald, et al. (1999) found that Namibians that received training on HIV or AIDS issues through the ‘My future is my choice’ program experience significant knowledge gains. Not only did people improve their knowledge on HIV and increase condom use, but they also changed their attitudes, intentions and behaviors with regard to sexual activity.

In this study participants show low levels of knowledge of modes of HIV transmission from mother to child (during pregnancy 40% and delivery 60%), although the main interventions of the PMTCT program, provision of nevirapine, aims to reduce intrapartum transmission and women need to understand this in order to be motivated to

take nevirapine. Studies conducted in Lagos, Nigeria indicates that the majority of women (89, 9%) had good knowledge of the mode of HIV transmission, however close to half of the women (41.7%) were not aware of the association between breast milk and HIV transmission (Ekanem, et al. 2004). In another study conducted in a teaching hospital in Northern Nigeria indicated that, 65% of women had good knowledge, 24% had fair knowledge and 11% had poor knowledge of HIV infection (Iliyasu, et al.2005). In contrast the literature revealed that at least 90% of the 25.3 million people living with HIV/AIDS in Sub-Saharan Africa does not know that they are HIV positive (WHO, HIV/AIDS.2002).

Almost, all participants identified the use of condoms as a means of protection from HIV infection. In the Witte, et al. study (2003) in Namibia, 71% of the informants report that they use condoms every time they have sex, while 21% of informants say that they use condoms most of the times they engage in sex. Other condom use studies in Namibia have revealed gaps in practices that may be contributing to the spread of the HIV pandemic. Available data (cf.SIAPAC, 1997) from both young and adult women from five regions in Namibia indicated that informants have knowledge of, and are aware of the risks of HIV transmission however, there seems to be no translation of this knowledge into sustained attitudinal or behavioral change.

Studies by Mensah, et al. (1998) and De Klerk, et al. (2000) indicate that health care providers at reproductive health in clinics and hospitals scold the people when they ask for condoms. It is significant that despite the majority of participants regarding condom use as a method of protection from HIV infection, some still see it as promoting

promiscuity. Some religions and cultural groups prohibit the use of condoms and provision of information concerning condom use, this leads to some of the population regarding, being faithful or abstaining from sex as the only options for them.

Many participants knew that an infected mother can protect her baby by getting nevirapine prophylaxis during labor. In Namibia out of more than 500 babies who were born to HIV positive mothers at Katutura and Oshakati hospital and who received nevirapine according to the schedule, only 4 babies tested positive after 18 months of follow up which represent 0.8% prevalence ratio (MOHSS, 2004). It has been established that the use of ARV medicines reduces the proportions of children who becomes infected vertically to 3% and below (MOHSS, 2004). Similarly in the literature it was indicated that in the developed world prevalence of HIV in children has significantly reduced since the use of the 076 regimen (oral AZT early in pregnancy intravenously during labor and orally to the infant for six weeks after birth) as the standard of care for HIV positive women.



This study showed that the participants had good knowledge of the range of HIV services available at the clinics including pre-test counseling, HIV testing, post-test counseling, antiretroviral and ongoing counseling. This is in line with current local policies which specify that in PMTCT programmer, pre-test, post-test and ongoing counseling need to be offered to all pregnant women, their partners and their families (MOHSS, 2004).

Also that routine Voluntary Counseling and HIV Testing should be integrated into antenatal care, maternity or at any other opportunity to all pregnant women who accept it to deliver effective PMTCT service rather than being provided through a separate VCT unit (MOHSS, 2004). The World Health Organization (WHO) is promoting the pre-test

initiative, which calls for HIV voluntary counseling as an entry point to access care and prevention (Stringer, et al. 2003). A study conducted in Kenya and Zambia about two-thirds of more than 22,000 women who sought antenatal care as new clients received pre-test counseling, but less than one-third went on to have an HIV test (Cartoux, M. 1998). In contrast it was found that when the HIV test was developed in the mid 1980's, testing tended to be accompanied by little HIV counseling. However, with the growing awareness of HIV or AIDS and the recent availability of antiretroviral therapy, the scope of and reasons for VCT and HIV testing have broadened (MOHSS, 2004).

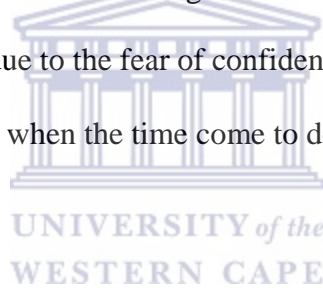
In this study (79%) participants consented to being tested for HIV. It has been found that previous HIV test history was a significant predictor of willingness to test for HIV, that is, women who reported having previously undergone HIV testing were more likely to accept another HIV test during pregnancy than those who had not been tested for HIV before (MOHSS, 2004). In 2002 Baseline study survey in Namibia, the majority (75.5%) of those who had ever had an HIV test indicated that it was voluntary, while about one-fourth (24.5%) indicated that it was required. Most of those who had an HIV test (89.2%) went back to find out about the results of their HIV test (MOHSS, 2002). Similarly in a study conducted by Fauci (2001) in Southern India, the majority (86%) reported that they would agree to test for HIV. Similarly in a pilot study of same day VCT in six urban antenatal clinics in Lusaka, Zambia, 84% of pregnant women requested testing and a quarter of those women tested positive. This group of women stated that they would consent to HIV testing in order to protect their unborn babies (Preble, et al. 2003).

Similarly in Tanzania, self –efficiency regarding alternative feeding methods and religion were shown to be associated with willingness to accept VCT and HIV testing (Pool, et

al. 2001). Similarly in a study conducted in Nigeria indicates that fifty three subjects gave informed consent to HIV testing. Five clients 9.4% did not turn up for their results and 3.8% consenters did not want to know their sero status.

The reaction to disclose the results included grief (28.1%), indifference (25%), surprise (15.6%), family concern (15.6%), denial (9.4%) and suicidal ideation (6.3%) (Isezuo, et al. 2004). Similarly in a study conducted in Nigeria most participants (81%) approved VCT, 13% disapproved of it and the remaining 6% was undecided. The main reasons for disapproval were; fear for stigmatization, isolation and effect on marriage security (Iliyasu, et al. 2005).

In contrast a study conducted in South West Uganda revealed that pregnant women were anxious about taking up VCT, due to the fear of confidentiality and fear that maternity staff might refuse to assist them when the time come to deliver if their status were known (Pool, et al. 2001).



This study showed that the participants knew the benefits of counseling, benefits of women taking up PMTCT and the benefits of testing for HIV. Their perspective including the importance of and relief associated with knowing ones HIV status, ability to live a better life or positively after testing, access health care and treatment during delivery or to prolong their life. Similarly, the literature mentioned that VCT may lead to behavior change, thus contributing to the reduction of HIV transmission. VCT also open opportunity for the infected individuals to access psychological support and care. VCT may encourage pregnant women to live positively after receiving counseling (Zandile, 2004).

5.1.4 Quality of counseling for VCT testing.

Counseling has been identified as a key component of a successful program and had previously been identified as a problem in programs in Namibia (MOHSS, 2004).

Counseling enables people to make an informed decision about being tested for HIV, assess their personal risk for HIV and develop a risk reduction strategy (Stringer, et al.2003). Counselling is said to help people to adhere to advice and treatment, offers an opportunity for the couples to plan for their future and enhance faithfulness among partners and has the effect of destigmatizing HIV testing (MOHSS, 2004). It is also said to contribute to positive living and acceptance of HIV results or status. In this study, participants indicated that subjects discussed with the counselor regarding HIV testing include prevention of HIV, taking HIV test, test results, enrolling in PMTCT program and ongoing counseling.

The majority of participants 98% indicated that they understood pre-test counseling, 93% were able to ask questions, understood the answer and said that confidentiality was explained to them. The literature indicates that clients expect to receive quality care and counseling from well trained and competent nurses/counselors with good counseling and interpersonal communication skills (MOHSS, 2004) and that only after proper counseling will the client make a good decision and adhere to the information given (MOHSS, 2003). In this study, the majorities of participants (40%) was either very satisfied and (58%) were satisfied with privacy and counseling received at clinic.

The positive satisfaction with counselors was in contrast to the expected outcome and is most probably due to the many health workers and community counselors were trained in

VCT/PMTCT program in the past two years. This in turn is thought to be one of the main factors in the high uptake of VCT in PMTCT found during the study. The majority of participants were happy preferred to be attended by anyone (65%) but (31%) said they preferred someone older than them. This is supported by literature which indicates that, clients are said not to like being counseled by counselors who are younger than themselves (MOHSS, 2004). On the other hand LeBeau, D. et al. (1999) found that young people experience difficulties in dealing with counselors older than them or those of the opposite sex. These factors emphasize the sensitive issues around counseling and the challenge for health services to have the most suitable personnel in place.

Another important issue was that of post-test counseling. Most participants found it helpful and preferred to be seen by the same counselor as they felt it ensured greater confidentiality. The VCT experts emphasize the use of same counselor and says that it promotes trust, enhance confidentiality and may even influence return visits in the future (MOHSS, 2004).

5.1.5 Barriers that prevents pregnant women from utilizing the VCT in PMTCT services.

Accessibility is one of the key barriers to utilizing VCT in PMTCT services. In this particular study the majority of participants lived within the catchments area of their clinics, and in fact almost half of the participants traveled less than 5km from home to the clinic. Also, the vast majority did not incur any transport costs. In contrast, in a study conducted in Bushenyi district, Uganda by Nuwaha, the factors influencing VCT for HIV were the consequences of test results, cost of VCT and physical accessibility of VCT

(Nuwaha, et al. 2002). This study found a higher ANC attendance of pregnant women at urban clinics than in rural clinics probably due to higher population and more pregnant women in the area. Tsintsabis clinic in rural area was selected for the study, but was not included because of poor antenatal care attendance.

There needs to be further investigation to assess the reason for low attendances to determine if it is due to number of people in the area or people are not using the clinic because of cultural or language barriers. The ANC attendance at Oshivelo clinic appears to be good, but there is a need for rapid testing, so that the clients can get their results on the same day. This study showed that the time for pre-test and post-test counseling was reasonable because the majority of the participants spent <30 minutes to 2 hours at the clinics.

The cornerstone of a successful PMTCT program is a high rate of HIV testing among pregnant women in order to identify those who are positive and at risk of transmitting the virus to their babies (MOHSS, 2004) and so it is important to understand reasons given by study participants for not testing.

Some said they feared AIDS, other said that they would face discrimination by family and community and some lacked trust around confidentiality. Others commented that there is not a need because they will die anyway. Similarly, in the literature, the reasons for refusing a HIV test are that many people with HIV are being discriminated against, and once their HIV status is known, they can lose their jobs, friends, homes and even their families (Goosen, et al.1996). At the xiv international AIDS Conference 2002, Nelson Mandela said, “stigma, discrimination and ostracism are the real killers”

(Bradford. 2004). Indeed, in Namibia where some 200,000 people are living with HIV or AIDS, less than 200 people have openly disclosed their status (MOHSS, 2004).

Alongside this, studies and experience in some regions in Namibia have shown that most women actually desire testing in order to protect their babies, but unfortunately they often fear stigma and rejection if they were to test positive (MOHSS, 2004). There is evidence of HIV positive mothers' breastfeeding their babies, despite the risk of HIV transmission, because they fear stigma or being labeled as having HIV. According to Fox (2002), Namibian cultural traditions are an important source of transmission of HIV/AIDS such as widow inheritance and polygamy. It is not yet well understood by community members that these practice have risky implications for HIV transmission. Stigma is largely driven by social and familiar pressure "family name" some people living with HIV are given names according to their complains like "that one with diarrhea or skinny because he/she is thin", some cultural, religious norms and value as well as by fear of AIDS and secrecy. Cultural, social norms and values still seem to inhibit some parents from breaking the barriers in addressing sexual and reproductive health issue with their young adults.

Other factors given that have been alleged to deter people from testing including; the belief that a person is outside the category of risk, lack of awareness about HIV infection rates in one's community, fear of being labeled and stigmatized by significant others, perception of the consequences of living with HIV and user friendliness of testing sites. There is also evidence from some studies of a lack of understanding of the value of antiretroviral treatment which prolongs and improves the health of HIV positive patients.

In Zimbabwe, for example, where the majorities of the population are rural and have never heard about antiretroviral drugs it is reported that the population largely do not know the purpose of ARV and, if when they can access the life prolonging drugs and so for them an HIV diagnosis is equal to a death sentence (Bradford, 2004).

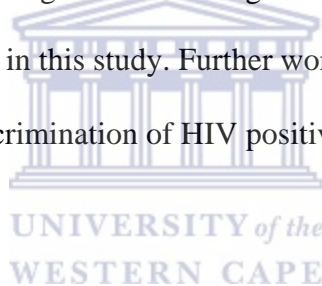
5.2 Conclusion

This study set out to assess the Voluntary Counseling and HIV Testing services and identify the factors that contribute to low uptake among pregnant women attending antenatal care services in public facilities. The study confirmed that VCT was integrated into antenatal care at three study clinics and has been fully operational since the introduction of PMTCT program since August 2004. It found that there is a higher ANC attendance in urban clinics compared to rural clinics and this is probably due to the number of women living in the area, but further investigation may reveal other factors.

In contrast to the expected results, this study found that the uptake of VCT in PMTCT by pregnant women was high across all three study sites. Since the pilot studies (MOHSS, 2004) trained nurses and community counselors in VCT/PMTCT have been placed at each clinic providing good counseling services to pregnant women attending ANC. Furthermore the introduction of the rapid HIV test in two clinics in the district which allows for the participants to be tested and get their results on the same day was likely to have a positive impact on the study findings. Two clinics; Oshivelo and Tsintsabis clinic are still using the Elisa test resulting in continued time delays in the return of the results to the clinic. Participants were generally very positive about the counseling services they received at the clinic and understood benefits of HIV testing and

benefit of pregnant women accessing PMTCT if HIV positive. It is important for the health services to note preference for age of counselor and, in particular, the opportunity to have the same counselor. Participants had good knowledge of HIV transmission and protection and were aware about all the VCT/HIV services available at the clinics. Importantly, the study identified that the main factors influencing VCT/PMTCT uptake as fear of stigma, discrimination, rejection by families and community members, fear for confidentiality about test result or status and attitudes of health workers and counselors.

Clearly this study indicates great positive moves by Namibian health services in the study clinics through improving quality of counseling and introduction of rapid testing in some clinics, and this alongside with a high understanding around HIV probably led to the very high rates of VCT uptake found in this study. Further work is required particularly around issues of stigma and discrimination of HIV positive persons and culturally acceptable safe sex practices.



5.3 Recommendations

1. Rapid test should be rolled out to all clinics which allows for the clients to be tested and get their results on the same day.
2. Confidentiality policy to be put in place at all the VCT sites to safeguard the interests of the clients.
3. More training is needed on Prevention of Mother to Child Transmission of HIV (PMTCT) and rapid HIV test for all levels of health personnel providing antenatal care in all public facilities.
4. Outreach services for VCT/PMTCT in areas with high prevalence of

HIV infection among women of childbearing age in order to reduce more transmission and to reach those in need.

5. More media or radio talks should be aired habitually to educate families and community members on HIV or AIDS issues.

6. Community action to reduce stigma around HIV or AIDS and to increase health promotion is needed.



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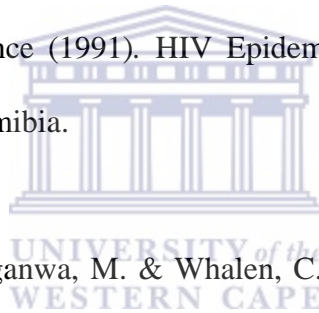
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APPENDIX

**INSTRUMENT: QUESTIONNAIRE
FACTORS AFFECTING VOLUNTARY COUNSELING AND HIV TESTING AMONG
PREGNANT WOMEN IN TSUMEB DISTRICT.**

Record number				
Researcher's name				
Date of interview		D	M	Y
Site description				
Tsumeb	1.	Region: Oshikoto		
Tsintsabis	2.	District: Tsumeb		
Lombard	3.	Respondent gender: Female		
Oshivelo	4.			

DEMOGRAPHIC DATA.



1. How old are you?

	<15- 20 yrs	1
	21 – 30 yrs	2
	31 - 40 yrs	3
	41- 49 +	4

2. What is your marital status?

	Married	1
	Single	2
	Divorced	3
	Widowed	4

3. What is you highest level of education?

	Primary	1
	Secondary	2
	University	3

4. Are you employed?

	Yes	1
	No	2

5. What is the distance between your house and this clinic?

	Less than 5km	1
	5-10 km	2
	More than 10km	3
	Don't know	4

6. How much do you usually pay for around trip between home and this clinic?

	Less than N\$10	1
	More than N\$10	2
	Not applicable	3

Knowledge about HIV and VCT in PMTCT

7. How does a person get infected by the HIV virus?
(Tick all applicable)

	Sexual transmission	1
	Infected mother to child	2
	Transmission through blood	3

Any other ways? Specify



8. How can one be protected against getting HIV? (Tick all applicable)

	Abstinence	1
	Be faithful	2
	Condom use	3

Any other ways? Specify

9. In what way can an infected pregnant woman transmit HIV to her unborn baby? (Tick all applicable)

	During pregnancy	1
	During Delivery	2
	During Breastfeeding	3

10. Apart from the clinic today, where else have you heard about VCT in PMTCT services? (Tick all applicable)

	Clinic (previous occasion)	1
	Radio	2
	Television	3
	Newspaper	4
	Family members	5

Others, Specify _____

11. What VCT and HIV services are available at this clinic? (Tick all applicable)



	Pre-test counseling	1
	HIV testing	2
	Post-test counseling	3
	Ongoing counseling	4
	ART	5

Attitude and Practice to HIV and VCT services

12. In general, what do you think are main benefits of having an HIV test?

13. In general, what do you think are the main fears of having an HIV test?

14. Do you think that VCT should be part of PMTCT services?

	Yes	1
	No	2

15. What are the benefits of pregnant women taking up VCT service in PMTCT?

16 Is it necessary to invite partners for counseling?

<input type="checkbox"/>	Yes	1
<input type="checkbox"/>	No	2

17. What are the benefits of counseling?

18. What is the general attitude of your community towards people living with HIV/AIDS?

COUNSELING

Pre-Counseling



19. What did you talk about with the counselor regarding HIV testing today?
(Tick all applicable)

<input type="checkbox"/>	Prevention of HIV	1
<input type="checkbox"/>	Taking a HIV test	2
<input type="checkbox"/>	About the test result	3
<input type="checkbox"/>	Ongoing counseling	4
<input type="checkbox"/>	Enrolling in special program	5

20. Did you understand pre-test counseling?

<input type="checkbox"/>	Yes	1
<input type="checkbox"/>	No	2

21. Were you able to ask any question during your visits?

<input type="checkbox"/>	Yes	1
<input type="checkbox"/>	No	2

22. Did you understand the answer to your questions?

<input type="checkbox"/>	Yes	1
<input type="checkbox"/>	No	2

23. Were you explained about the test's confidentiality?

	Yes	1
	No	2

24. If you had a choice, would you have preferred to be attended by?
(Tick all applicable?)

	Female	
	Male	
	Somebody younger than you	
	Somebody older than you	
	Somebody of your age	
	Anybody	

25. Were you tested for HIV?

	Yes	1
	NO	2

26. If yes, what made you decide to have an HIV test?

27. If no to Q 25, are you planning to get tested?

	Yes	1
	No	2



28. Did the staff ask you to come back for another visit?

	Yes	1
	No	2

POST-TEST COUNSELING (Q 29-36 only for those who have had a HIV test.)

29. If tested, did you get your HIV results?

	Yes	1
	No	2

30. Did you find the post-test counseling helpful?

	Yes	1
	No	2

31. If yes, in what way was it helpful?

32. If no, in what way was it not helpful?

33. Were you able to see the same counselor during pre- and post-test counseling?

<input type="checkbox"/>	Yes	1
<input type="checkbox"/>	No	2

34. If no, how did you feel about seeing a different counselor?

35. How satisfied are you with the privacy and counseling you receive at the clinic today? (Tick one)



Very satisfied	<input type="checkbox"/>	1
Satisfied	<input type="checkbox"/>	2
Unsatisfied	<input type="checkbox"/>	3
Very unsatisfied	<input type="checkbox"/>	4

36. How many hours did you spend at the clinic today?

<input type="checkbox"/>	< 30 min	1
<input type="checkbox"/>	30-60 min	2
<input type="checkbox"/>	60-2 hours	3
<input type="checkbox"/>	2-4 hours	4
<input type="checkbox"/>	> 4 hours	5

THANK YOU FOR YOUR TIME



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