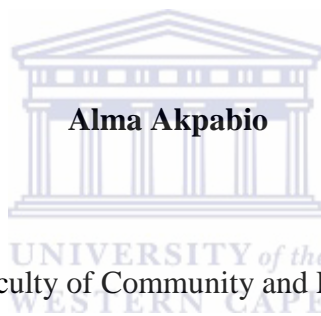


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**UNIVERSITY OF THE WESTERN CAPE**  
**Faculty of Community and Health Sciences**

**ATTITUDE, PERCEPTIONS AND BEHAVIOUR TOWARDS FAMILY PLANNING  
AMONGST WOMEN ATTENDING PMTCT SERVICES AT OSHAKATI  
INTERMEDIATE HOSPITAL, NAMIBIA.**



A mini-thesis submitted to the Faculty of Community and Health Science of the University of the Western Cape in partial fulfilment of the requirement for the degree of Masters in Public Health.

Supervisor: Dr. Thubelihle Mathole

November 2010

## **KEY WORDS**

Contraceptive choices

Family planning

Family planning services

Fertility

HIV/AIDS

PMTCT

Voluntary Counselling and Testing

Knowledge

Utilization

Integration



## ABSTRACT

**Background:** About 22.4 million people were living with HIV/AIDS in 2008 out of which women constitute approximately 57%. Namibia is one of the highly affected countries with a national HIV prevalence of 17.8% among women attending antenatal clinics. Antiretroviral medications have become available in Namibia since 2002 and presently all district hospitals and some health centres provide ARVs to those in need. Namibia is rated as one of the few countries in sub-Saharan Africa with a high coverage of ART, with 80% of those in need of ART receiving the treatment. An increasing trend has been observed whereby HIV+ women on ARV are becoming pregnant. Little is known about the attitude, knowledge and behavior of these women towards family planning and use of contraceptives and what barriers they may be facing in accessing these services.

**Aim:** To determine the factors affecting the utilization of family planning services by HIV+ pregnant women receiving PMTCT services.

**Methodology:** The study was a cross sectional study using both quantitative and qualitative methods to assess the critical elements of knowledge, attitude and perceptions of the study participants towards family planning services. The study also assessed the health system and other factors that impact on the use of contraceptives by HIV+ women. It was conducted in northern Namibia at Oshakati Health centre among randomly selected pregnant HIV+ women attending for PMTCT services.

**Results:** Among the 113 respondents, who participated in the study, 97.3% knew at least one method of family planning but only 53.6% actually used any method of contraception prior to current pregnancy. Among the 46.4% who did not use any contraception, the reasons often cited for non-use were because they wanted a baby (52%), spouse objection (10%), being afraid of the effects (14%) and other reasons such as belief, culture and distance to travel to the health facility. 88% of the respondents indicated a willingness to use contraceptives after current pregnancy and expressed general satisfaction with services at the health centre while asking for more information on family planning services.

**Conclusion:** HIV+ women have high awareness on some contraceptives but use of contraceptives is not as high as many of them have a desire to have children for self esteem and leave a legacy for the future. Knowledge of the risks of pregnancy on HIV+ woman may be limited and there is a need to improve educational intervention in this regard as well as integrate family planning services into all HIV/AIDS services.



## **DECLARATION**

I declare that “Attitude, perceptions and behaviour towards family planning amongst HIV-positive women attending PMTCT services at Oshakati Intermediate Hospital, Namibia” is my own work, that this work 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.

Alma Akpabio

November 2010

Signed.....



## **DEDICATION**

This work is dedicated to my beloved mother Alma Ivali who laid the foundation of my education. I would also like to dedicate my work to my three daughters; Aimee, Rosa and Enobong.



## **ACKNOWLEDGEMENT**

I am grateful to the following people and institutions who contributed in one way or another towards the success of this study:

My supervisor Dr. Thubelihle Mathole for her continuous support and valuable inputs in this study.

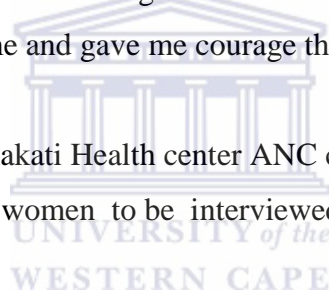
The Ministry of Health and Social Services for granting me permission to conduct the study, the Oshana Regional Directorate management team as well the management of Oshakati Intermediate Hospital for allowing me to conduct the research in the health facility.

To my dearest husband Dr. Ebong Akpabio for the data analysis and the proof reading of the study.

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My gratitude also goes to the Oshakati Health center ANC clinic staff who despite their heavy work load arranged for the women to be interviewed.



## **LIST OF ABBREVIATIONS AND ACRONYMS**

|        |  |
|--------|--|
| AIDS   | Acquired Immune Deficiency Syndrome                |
| CBS    | Central Bureau of Statistics                       |
| GRN    | Government of the Republic of Namibia              |
| MOHSS  | Ministry of Health and Social Services             |
| NDHS   | Namibia Demographic Health Survey                  |
| PLWA   | People Living with HIV/AIDS                        |
| PMTCT  | Prevention of Mother to Child Transmission of HIV  |
| STI    | Sexually Transmitted Infections                    |
| UNAIDS | Joint United Nations Program on HIV/AIDS           |
| UNICEF | United Nations Children's Fund                     |
| UNDP   | United Nations Development Program                 |
| USAID  | United States Agency for International Development |
| VCT    | Voluntary Counselling and Testing                  |
| WHO    | World Health Organization                          |



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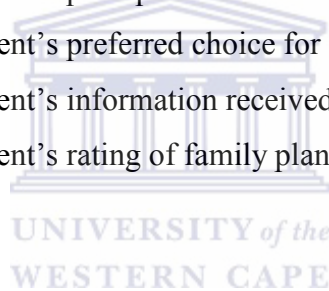
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## **CHAPTER 1: INTRODUCTION AND PROBLEM STATEMENT**

### **1.1 Introduction**

About 1.7 million people in sub-Saharan Africa became infected with human immunodeficiency virus (HIV) in 2008 (UNAIDS, 2009). This brings the total number of people living with HIV/AIDS in the region to 22.4 million compared to 20.5 million in 2006, a slight decline attributed to the stabilization of the epidemic in some of the countries in the region. The report further indicates that remarkable strides have been made in expanding access to the prevention of mother to child transmission of HIV, and about 45% of all HIV infected pregnant women received antiretroviral medications in 2008 (UNAIDS, 2009).

HIV can be transmitted from an HIV-positive pregnant woman to her unborn baby during pregnancy, labour and delivery or through breastfeeding (MOHSS, 2008a). In breastfeeding women, the risk of maternal to child transmission is 20-45%. Overall, without breastfeeding, the HIV transmission risk is 15-25% (MOHSS, 2008a). Since 2004 free antiretroviral (ARV) medicines have been available in all 34 state hospitals in Namibia and the PMTCT program has been rolled out to most health facilities in the country.

Access to antiretroviral medicines has been expanded in Namibia and the country is rated among the top providers of ARV's in the sub-Saharan Africa (MOHSS, 2008b). The availability of the ARV medicines has led to improved health status and quality of life of infected people as many resume their rightful roles in society as productive citizens.

An increasing trend has been noted among the HIV-positive women on ARVs who are becoming pregnant. In a recent multi-country study in sub-Saharan African countries, Myers et al. (2010) report that the rate of new pregnancies was significantly higher among women receiving ART compared to women who were not on ART. One possible reason may be poor family planning awareness and implications of pregnancy in HIV-infected individuals. The Collins dictionary defines family planning as 'the control of the number and spacing of children in a family by the use of contraceptives', while contraception on the other hand is defined as 'the deliberate use of artificial or natural means to prevent pregnancy' (Collins, 2006). Family planning is recognized as a key intervention for improving the health of women and children. Knowledge of family planning is universal among Namibian women

with 98% of women and men reporting that they have heard of at least one method of family planning (MOHSS & Macro International, 2008) but knowledge may not necessarily translate to practice or utilization of family planning services.

Early studies have shown that pregnancy has a deleterious effect on the health of an HIV+ woman in developing countries (Verkuyl, 1995) as HIV-infected women are more likely than uninfected women to develop malaria during pregnancy which subsequently results in increased risks of maternal, perinatal and early infant deaths (Ticconi et al., 2003). Recent studies however indicate that pregnancy does not appear to accelerate HIV progression (Minkoff et al., 2003; McIntyre, 1999; Bessinger et al., 1998; Vimercati et al., 2000). However during pregnancy, there's a normal drop in CD4+ cell counts that usually rebounds after birth to pre-pregnancy levels. This is normal for any woman, regardless of HIV status. However, if the CD4+ cell count falls below 200, the woman is at a higher risk for opportunistic infections (Project Inform, 2005). The HIV+ woman may not be well informed of these risks. This study also seeks to find out whether women make informed decisions when deciding to get pregnant.

This study aims to find out what the HIV positive women's perceptions, attitudes and behaviour about family planning are. The findings will guide the authorities and health workers in designing effective strategies and approaches for counselling on family planning services for people living with HIV/AIDS.

## **1.2. Background information**

Oshana region is geographically the smallest region in Namibia, covering 5290 square km with a population of 186 754 (NPC, 2001). It shares borders with other Northern regions; Oshikoto to the east, Omusati to the south and Ohangwena to the north. The region has one health district, Oshakati, and three towns of Oshakati, Ongwediva and Ondangwa, which are all governed by the Municipal Councils.

The economy of the region is mostly centred on the three towns where companies and industries are. Most of the unemployed flock to towns in search of work opportunities. The

rural community relies on subsistence farming and the informal businesses. The rural areas have 69% of the population while the urban areas are only populated by 31% (CBS, 2003). Females out-number males by 100 females per 84 males as men migrate out to other urban centres in search of employment. This in itself put women at risk of HIV and other sexually transmitted illnesses (STIs). Fifty four percent (54%) of the households are female headed households (NPC, 2006). Life expectancy for the region is 48 years for females and 46 years for males. The life expectancy continues to fall due to high levels of HIV infection and deaths due to AIDS. It is estimated that 17.2% of all children in the region are orphans compared to the national average of 13.5% (CBS, 2003).

The literacy rate for Oshana region stands at 89%. For those aged 15 years and older, 8% have never attended school, those currently at school 22% and those who left school is 65% (CBS, 2003). The educational level of women is not clear, but it is assumed that most women of childbearing age have attained primary school level literacy.

Oshana region has one main public hospital, the Oshakati Intermediate hospital with 750 bed capacity. There are five health centres and eleven primary health care clinics. All health facilities render antenatal services which include voluntary counselling and testing and PMTCT services. The Intermediate Hospital Oshakati also serves as a referral hospital for the regions of Oshana, Ohangwena, Omusati, Oshikoto and Kunene for specialized medical services. There is one private hospital based at Ongwediva and a number of private clinics and consulting rooms scattered over the region.

Table 1: Socio-demographic indicators for Oshana region (MOHSS & Macro International, 2008).

| <b>Indicator</b>      | <b>Rate</b>         |
|-----------------------|---------------------|
| Neonatal Mortality    | 29/1000 live births |
| Infant mortality      | 49/1000 live births |
| Under- five mortality | 74/1000 live births |
| Fertility rates       | 3.0                 |



Health education and promotion activities are carried out routinely at all public health facilities, mainly in the clinics, health centres and at the outpatient department of the hospital. Also health education and promotion activities are carried out in the specialized clinics such as antenatal clinic, ART clinic and in the TB clinic. The Ministry of Health and Social Services also has designated days and special events such as World AIDS Day, World TB Day, National Condom Use Day, Africa Malaria Day and Child Health Days whereby intensive health education on HIV/AIDS prevention, adherence to ARVs, use of condoms, prevention and seeking early treatment for TB, use of impregnated bed nets, nutrition and importance of immunization are often emphasized in these different forums. Family planning counselling and education and prevention of mother to child transmission of HIV are often covered in health education sessions in ante-natal clinics (MOHSS, 2008c). Regular health education campaigns in both the electronic and print media as well as community meetings form part of the Ministry's strategy to educate the public on HIV/AIDS (GRN, 2004). Access to radio as a source of information among the population has been reported to be at about 84% in the region (NPC, 2001).



### **1.3 Settings of the study**

The setting of the study was at Oshakati health centre which has a catchment population of 17 533 people. The Oshakati health centre where the research was conducted is situated within the Oshakati hospital complex in northern Namibia. It conducts antenatal clinic first visits once a week on Wednesdays as well as follow-up visits twice a week on Thursdays and Fridays. The health centre conducts an average of 120 antenatal care first visits per month. All pregnant women receive group counselling during the first visit. This is followed up with the individual counselling by the Community Counsellor and nurses who are trained counsellors as part of the Government Antenatal care protocol. The health centre serves as the first port of call for patients visiting the Oshakati Hospital for health services. Oshakati Hospital is well equipped, centrally located with good laboratory support services and adequate number of health care workers. The Hospital operates through many specialized departments and units, including the Department of Obstetrics and Gynaecology and the department of Paediatrics both of which are involved in PMTCT services. A specialized HIV/AIDS service that receives good funding from the government and international partners

is run in the hospital. Oshakati Hospital also serves as the main referral centre for patients from the four north-central Regions of Namibia and part of the Kunene Region to the northwest. Oshakati is the main urban centre in north-central Namibia and is inhabited mostly by the Oshivambo-speaking people.

The HIV prevalence in Oshakati according to the MOHSS 2008 sentinel sero-survey stood at 22%. In 2009 about 1435 pregnant women enrolled at the antenatal clinic at the health centre, 144 (10.03%) of whom were known HIV positive, 1240 (86.40%) were tested at enrolment out of which 158 (12.74%) tested positive. These women were all enrolled in the PMTCT programme.

## **2. Problem Statement**

The 2006/2007 Namibia National Demographic Health Survey (NDHS) estimated the Total Fertility Ratio (TFR) to be at 3.6 births (MOHSS & Macro International, 2008). In the Namibian culture child bearing is important to ensure continuation in the family tree and big families are the norm. In Oshana Region where Oshakati district falls under, the total fertility rate is 3.0. HIV infection has been linked to a reduction in fertility in the United States and some African settings (Gray, R., Wawer, M. & Serwadda, D., 1998). According to the above study it is mainly due to an informed choice not to have any more children and spontaneous abortions and still births.

Current use of modern family planning method among women in Namibia is 68%. Married women with unmet need for family planning are 6% (MOHSS & Macro International, 2008). Contraceptives are freely available to women of child-bearing age at all public health facilities. Generally the main reasons given for non-use of contraception by women in Namibia according to the 2000 NDHS report were a desire for more children and an infrequent or no sex. Other common problems like access and other health concerns related to contraceptive methods.

About 93% of pregnant women in Namibia receive ante-natal care, 91% of whom receive care from health care professionals (MOHSS, 2003). With the introduction of PMTCT programme all women who attend antenatal clinic are required to be counselled for

HIV/AIDS and be enrolled in the programme with consent. HIV testing is optional and women are given group education on the benefits of HIV testing and they can either opt in or opt out if they do not want to be tested (MOHSS, 2008a).

**Table 2: Selected PMTCT indicators for Oshakati Health Centre 2007-2009.**

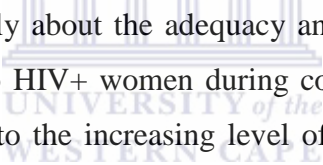
Source: (IHO HIS report, 2010).

| <b>Year</b> | <b>Women starting ANC</b> | <b>Known HIV+ (%)</b> | <b>Total Women tested for HIV (%)</b> | <b>Tested HIV+ (%)</b> | <b>Tested HIV- (%)</b> | <b>Women not tested for HIV</b> |
|-------------|---------------------------|-----------------------|---------------------------------------|------------------------|------------------------|---------------------------------|
| 2007        | 1291                      | 142<br>(10.99)        | 1088<br>(84.27)                       | 195(17.92)             | 893(82.07)             | 32                              |
| 2008        | 1456                      | 161<br>(11.05)        | 1179<br>(80.97)                       | 182<br>(15.43)         | 997<br>(84.56)         | 32                              |
| 2009        | 1435                      | 144<br>(10.03)        | 1240<br>(86.40)                       | 158<br>(12.74)         | 1082<br>(87.25)        | 30                              |

The last two years has seen an increase in the number of women enrolling for the PMTCT program in Oshakati Hospital (Table 2). The proportion of known HIV positive women who become pregnant has hovered around 10-11% in the last three years while the proportion of women who test positive during current pregnancy has stands at about 12-18%. Additionally, as observed in other countries, many women who start improving on the antiretroviral therapy are becoming pregnant (verbal communication from Mrs. Nghindegwa, Registered Nurse, ANC Oshakati). The desire for parenthood among women living with HIV appears real as they are expected to bear children by their spouses and other extended family members despite their HIV status, although their status may not be known by the family members. The disclosure rate for the HIV+ for Namibia is not known. In other studies on disclosure of HIV status to sexual partners in developing world among women attending

antenatal care in sub-Saharan Africa the disclosure rates ranged between 16.7 to 32% (WHO, 2004). From these studies it is clear that a large number of women did not share their HIV test with anyone.

Pregnancy impacts on HIV/AIDS as it puts additional strain on the health of the mother. The risk of maternal mortality is high and is linked to obstetric causes such as haemorrhage, hypertension, obstructed labour and AIDS complications such as puerperal sepsis, complications of caesarean section and other opportunistic infections (NCOCEIMD, 1998). Oshakati falls under the endemic malaria districts in Namibia and the chances of HIV-infected pregnant woman contracting malaria with the attendant adverse outcome is high. Although Oshakati Hospital is in an urban area set up, women in the surrounding rural areas have access to it. Thus, Oshakati does not only cater for the urban women, but also for the rural women.



One therefore wonders specifically about the adequacy and acceptability of information on family planning services given to HIV+ women during counselling services and in general about the factors that contribute to the increasing level of pregnancy noted among women with known HIV status. It could be natural that more women with known HIV status are becoming pregnant as the total number of women living with HIV is increasing (due to cumulative effects of continued incidence increasing prevalence, and ARV therapy). Although family planning services are available and accessible at all public health facilities to all women including HIV+ women, little is known about the attitude, perception and behaviour of the women towards these services. The quality of the services offered at the family planning clinics has also not been assessed. This study therefore aims to investigate the factors that contribute to the observed increasing tendency for HIV+ women to become pregnant and what strategies can be put in place to address these. There might be unmet needs for family planning. It is also a known fact that women including those in Oshakati district face many barriers to effective utilization of family planning. These are the cultural barriers as they are often not the ones to determine the size of the family or the number of children to have but rather the spouse, in laws or elders. They also have economic barriers on when and how to access the health facilities for family planning due to the cost of travel and

time off from work. To what extent these impacts on the choice and use of family planning services among HIV+ women in Namibia have not been previously explored.

### **3. Purpose**

The purpose of the study was to assess the attitude, perceptions and behaviour about family planning practices among HIV-positive women attending ante-natal clinic in Oshakati Hospital, Namibia, in order to design appropriate programs of intervention to ensure overall well being of HIV+ women and children. The study also assessed the availability of family planning and counselling services rendered to HIV-positive women at the family planning and antenatal clinics at Oshakati Hospital. No previous study has been conducted in this area in Namibia. Women at ANC receive information on general ANC care, HIV and pregnancy, HIV/AIDS care and PMTCT during the first and follow up ANC visits (MOHSS, 2008a). The questions arise whether the information is given timely or perhaps too late when these women are already pregnant and infected with HIV. It is not known what level of family planning counselling is given to the women when they are first diagnosed HIV+ or when undergoing ART treatment. Although a comprehensive PMTCT programme seeks as its secondary level of intervention the prevention of unintended pregnancy among HIV+ women, implementation of this level is often overlooked or poorly done as the focus of many PMTCT programmes often seems to be women attending antenatal clinic who are already pregnant.

### **4. Aims and Objectives**

#### **4.1 Aim**

To determine the factors affecting the utilization of family planning services by HIV+ pregnant women receiving PMTCT services.

#### **4.2 Specific Objectives**

4.2.1 To investigate the attitude, perceptions and behaviour of HIV+ women attending ANC on family planning.

4.2.2 To assess the availability of family planning services offered to HIV+ women.

4.2.3 To identify barriers to the utilization of family planning services by HIV+ women.

## **5. Thesis Outline**

Chapter 1: This chapter consists of the orientation to the study, formulation of the problem, purpose and objectives of the study.

Chapter 2: A review of the relevant literature.

Chapter 3: The research methodology; study design, study sample, data collection procedures, data analysis procedures and ethical considerations overview.

Chapter 4: Presentation of findings and interpretation of the results.

Chapter 5: Discussion of the findings, conclusions and recommendations



## **CHAPTER 2: LITERATURE REVIEW**

### **2.1. Introduction**

This chapter will review the literature related to this study. It includes the ideas and findings of other researchers on what is known about the research problem and what still need to be researched.

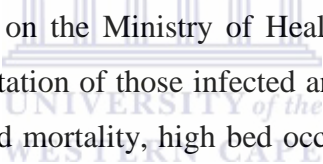
### **2.2. Global situation of HIV/ AIDS and its impact on women and children.**

At the end of 2008 the Joint United Nations Programme on AIDS (UNAIDS) estimated that a total of 33.4 million people were living with HIV/AIDS worldwide, 15.7 million were women and 2.1 million children under 15 years of age. In the same year 2.7 million people became newly infected and 2.0 million succumbed to HIV/AIDS mostly in Africa (UNAIDS, 2009). From the newly infected people 430 000 were children worldwide. In sub-Saharan Africa 390 000 children under 15years were newly infected with HIV. Although the number of children newly infected with HIV was 18% lower than in 2001 when the HIV epidemic was at its peak, the new infections among children are a great concern as it affects the quality of their lives. The children could also be orphaned early in life. In 2007 Namibia had a total of 128 000 orphans, mostly as a result of HIV/AIDS (Ministry of Gender Equality and Child Welfare, 2008).

With HIV/AIDS there is increased morbidity and mortality despite the availability of antiretroviral therapy. Overall in Namibia the life expectancy has dropped to 48 years (NPC, 2003). Life expectancy for other countries in the subcontinent is reported as South Africa (49.3), Botswana (50.7), Zambia (42.4) and Zimbabwe (43.5) (United Nations, 2007). For the developed countries the life expectancy is higher, for example in Canada (80.7), Japan (82.6) and the United Kingdom it is 79.4 years (United Nations, 2007).

HIV/AIDS continues to be a major health problem as it disproportionately impacts on women and girls due to their physiological make-up, as well as their social and economic disadvantages (Prince,Pugh & Kleintjies, 2007). Many women are unemployed and depend

on men for their economic survival. In some of the cultures it is difficult for a married woman to refuse sexual advances from the man and this often happens without use of condoms. In a study of behavioural and contextual factors driving the HIV epidemic in Namibia it was found that multiple and concurrent partnership with inconsistent condom use, inter-generational sex, and transactional sex are factors that are likely lead to the spread of HIV in the country (MOHSS, 2009). These factors put women at risk of HIV, as among the women aged 15-24, 7% of single women and 26% of married women have an older partner that could introduce HIV into the younger generation. Multiple and concurrent relationships are common throughout Namibia, with many married men reported to have other partners outside wedlock (MOHSS, 2009). The seasonal work in the mining, fishing and agricultural sectors that require men to be away from family homes also aggravate the spread of the epidemic. Many men from the rural areas are employed in these sectors in the bigger towns (MOHSS, 2009). This is not necessarily the only way how the HIV spreads as couples who are not working away from home are also affected in the country.



HIV/AIDS places a high burden on the Ministry of Health for adequate resources for the preventive, treatment and rehabilitation of those infected and affected. In general HIV/AIDS has led to increased morbidity and mortality, high bed occupancy rates, excessive workload for health care professionals and even migration of health workers for greener pastures. At household level reduced income where breadwinners are infected; poor households struggle to meet the basic needs that lead to malnutrition. Reduced food production coupled with natural disasters like the floods and droughts. Children are orphaned and the life expectancy in developing countries has fallen sharply (AVERT, 2010).

HIV/AIDS contributes significantly to maternal mortality in Namibia. A total of 57 maternal deaths were reported of which 30 cases were due to HIV/AIDS through a recent review in the country (MOHSS, 2006).



Table 3: Causes of maternal deaths identified through EmOC review in Namibia, 2006

| <b>Direct causes</b>       | <b>Causes of deaths</b>   | <b>No of cases</b> |
|----------------------------|---------------------------|--------------------|
|                            | Haemorrhage               | 3                  |
|                            | Puerperal sepsis          | 1                  |
|                            | Complications of abortion | 1                  |
|                            | Obstructed labour         | 3                  |
|                            | Eclampsia                 | 4                  |
| <b>Total direct</b>        |                           | 12                 |
| <b>Indirect causes</b>     | HIV/AIDS                  | 30                 |
|                            | Severe Anaemia            | 1                  |
|                            | Malaria                   | 4                  |
|                            | Other indirect causes     | 10                 |
|                            | Indirect causes           | 45                 |
| <b>All causes of death</b> |                           | 57                 |

Other effects on HIV+ women and pregnancy apart from increased maternal deaths are the increased newborn morbidity and mortality. It is against this background that the Ministry of Health and Social Services launched the ‘Roadmap for accelerating the reduction of maternal and newborn morbidity and mortality in 2008 (MOHSS, 2007). The roadmap aims to:

- Reduce the maternal mortality ratio of 271/100 000 live births by three quarters by 2015.
- Reduce the neonatal mortality from 20/1000 live births by 25% by 2015.
- Reduce the teenage pregnancy rate by one quarter from 15% to 13% by 2015.

The importance of reducing the maternal mortality on the African continent was also emphasized by the Southern African development Community (SADC) Heads of state and

governments. Through a communiqué at the end of the 30<sup>th</sup> Jubilee summit they urged the member states to support safe motherhood programmes in order to reduce maternal, infant and child mortality in line with the Millennium Development Goals (MDG's) commitments (SADC Communique, 2010).

### **2.3 ART/PMTCT as an intervention strategy**

With the increasing number of new infections and the availability of antiretroviral medicines, the World Health Organization (WHO) and other international partners have encouraged and supported countries to provide and scale up the provision of antiretroviral medicines to those in need. The WHO had set a target of reaching 3 million people with ARVs by 2005 but that target was not reached as only about 800 000 people were estimated to be on ARVs by the end of 2005 (WHO, 2006). However many countries are striving to increase access to ARVs for those in need. In Namibia about 22 000 people were estimated to be on ARVs by the end of March 2007 (MOHSS, 2007b) and by March 2008 over 30 000 people were said to be on ARVs (MOHSS, 2008b). With the rapid scale up of ART services in Namibia as of March 2009, 64 637 people in need of ARV were receiving treatment, 57 015 adults and 7 622 children in the public sector (MOHSS, 2010a). A considerable number of clients in the private sector also received ARV from private medical practitioners. The figure indicates that more than 80% of patients in need of ART are receiving ART, 64% of those on ART are women and 16% of patients on ART are children (MOHSS, 2010b) This seems to have an unexpected effect of more HIV positive women and couples deciding to get babies as the ARVs are available for themselves and the new babies.

Namibia has reported an increased maternal mortality which has largely been attributed to HIV/AIDS in the country. The National Demographic and Health Survey of 2006/7 reported a maternal mortality ratio of 271 per 100 000 live births, which is higher than the 225 deaths per 100 000 live births reported in 1992 (MOHSS & Macro International, 2008). The need to reverse the trend is being pursued through various strategies and programmes in line with the Millennium Development Goals. Educating women and their partners, provision of acceptable family planning services and other resources will be needed to achieve the target.

In Namibia the programme of prevention of mother to child transmission of HIV (PMTCT) has also been vigorously pursued. This includes voluntary counselling and testing, provision of Nevirapine, Lamivudine and Zidovudine to the pregnant woman during and immediately after labour as well as to the newborn within the first 7 days after delivery, counselling for infant feeding and nutrition including exclusive breastfeeding for the first 4 months (MOHSS, 2008b). Pregnant women who meet the criteria for full Highly Active Antiretroviral Treatment (HAART) are referred to the ARV clinics for initiation of treatment.

The PMTCT coverage for Namibia is high with 62 028 (99%) of 61 981 women who started antenatal care in 2008/2009 financial year introduced to PMTCT services (MOHSS, 2010a). The importance of the PMTCT program cannot be over- emphasized as it can save the lives of mothers and their babies through a combination of HIV counselling and testing, access to effective antiretroviral prophylaxis and treatment, safer delivery practices and good feeding options.

A needs assessment for emergency obstetric care (EmOC) conducted by the Ministry of Health and Social Services to determine the availability, utilization and quality of EmOC services in the regions found that 13% of public facilities assessed provided rapid testing for women in labour ward and all state hospitals provided antiretrovirals (ARVs) to newborn babies of HIV positive mothers in the preceding three months (MOHSS,2006).

Table 4: Namibia PMTCT indicators for 2008/9

(Source MOHSS, 2010a).

| Indicators                 | Total number | Percentage % |
|----------------------------|--------------|--------------|
| Expected pregnancies       | 62 028       | -            |
| Women started ANC          | 61981        | 99           |
| Women pre test counselled  | 56 690       | 91           |
| Women tested for HIV       | 53 934       | 95           |
| Women tested HIV positive  | 6 063        | 11           |
| Women post test counselled | 48 325       | 90           |
| CD4 cell done              | 5 650        | 93           |
| Received ARV prophylaxis   | 6 744        | 74           |

Global coverage for PMTCT varies from country to country and most countries have not reached all pregnant women with these services. In sub-Saharan Africa, in 2008, 45% of HIV-infected pregnant women received ARVs to prevent HIV transmission to their newborns. Generally coverage is higher in Southern and Eastern Africa (64%) than in West and Central Africa (27%). In Asia only 25% of the HIV-infected women received ARVs to prevent mother to child transmission while the transmission of HIV from mother to child has been virtually eliminated in Europe and North America (UNAIDS, 2009).

A comprehensive and integrated PMTCT services including access to and utilization of family planning services will therefore be pivotal to reduction of maternal and child morbidity and mortality worldwide.

## **2.4 Use of contraceptives**

In 2002 the UN Population division published data from 1997 from 153 countries on contraceptive use for women of reproductive age who were married or had a regular partner (UN, 2002). It showed an increased contraceptive use worldwide over the previous decade. The lowest use was in Africa (25%), followed by Asia (66%), Latin America and the Caribbean (69%). Nine out of ten users used modern methods. Oral contraceptives and condoms were popular in developed countries, while in developing countries traditional methods were used. In South Africa low dual protection using hormonal contraceptives plus condoms among family planning clients has been reported at the public health facilities (UNAIDS, 2008). The same study revealed that the majority of men and women agreed that the choice of using condoms lies with the men, whereas the decision on the type of contraceptive used was with the women. Contraceptives are freely available to women of child-bearing age at all public health facilities in Namibia. Provision is also made for men to access the Reproductive Health services including family planning that are underutilized (MOHSS, 2001). Policy provisions aside, identifying the key issues and factors that impact on the use of family planning services and the extent of adherence to the Policies in the Namibian environment will be crucial in ensuring quality of life for the HIV-infected women in the country.

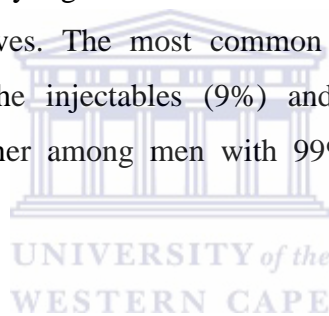
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## **2.5 Knowledge, attitude and utilization of family planning services by women**

The study by Megeid, Sheikh, El Ginedy & El Araby (2007) in Alexandria, Egypt among 4 000 women attending Primary health care/family planning facilities found that the majority had heard of family planning for many years. Of the 69% of women using contraceptives, 93% were using intrauterine devices (IUD), 5% using the pill, 2% using injectable contraceptives and only 2% were using condoms and other methods. Among those not using any form of contraceptive 60% wanted more children and 31% had not yet had their first baby. About 35% of women could not use a family planning method as their husband did not approve of it. The above study was done among rural women where the literacy rate was 21% and the unemployment rate higher than the national average. The study of women in an urban set up might give a different outcome on their knowledge and attitude on family planning. The high percentage of women using IUDs (93%) raises the question whether they

had adequate information and the freedom of choice on what contraceptive to use. Contraceptive method choice is a fundamental indicator of quality of care in a family planning programme. Stephensen, Beke and Tshibangu (2005) found that in South Africa the likelihood of using the pill or a more permanent method rather than the injection rose with the proportion of women in a community who controlled their earnings and the likelihood of using the injectable contraceptive was higher among women with only primary education.

HIV-positive women, like other women, are most likely to use a contraceptive method successfully if they made the choice of the method themselves (Stephensen, Beke & Tshibangu, 2005). They however need proper counselling on this as the method must be highly effective, carry low risk of woman-to-partner HIV transmission, and carry a low risk of partner-to-woman infection with other STIs (Cates, 2001). In Namibia the awareness of women on contraceptives is equally high with 97% of women interviewed in the 2000 NDHS having heard about contraceptives. The most common recognized method is the male condom (93%), followed by the injectables (9%) and the pill at 8%. The level of contraceptive knowledge is higher among men with 99% of men having heard about a modern method (MOHSS, 2003).



Despite high fertility rates and a high level of awareness on family planning in developing countries, the utilization remains low. Stephenson and Hennik (2003) identified administrative, economic, physical and psychosocial and cultural barriers to family planning for the urban and rural women. Indeed the 2006/2007 NDHS Report for Namibia revealed that the most commonly cited reasons by women for not intending to use contraceptives were fertility desires or problems, concerns with contraceptive method and general opposition to use (MOHSS and Macro, 2008). Specific issues surrounding the choice and use of modern family planning methods by HIV+ women would be highlighted in the current study.

## **2.6 Reproductive Health Care needs of PLWA**

People living with HIV have unique reproductive health needs that need to be addressed. Despite having the knowledge or information on HIV transmission and prevention they might choose to engage in unprotected sex to bear children. A study in Kenya that looked at family planning and safer sex practices among HIV infected women receiving PMTCT services found that the usage of family planning services was low among the 146 respondents (Bii, Otieno-Nyunya, Siika & Rotich, 2008). 73% of the women expressed no need to have babies, but at the same time they were not using any contraceptive to prevent pregnancy. Only 45% of women were using a family planning method, while 38% of respondents reported condom use with their partners (Bii, et al, 2008). Although this was a qualitative study using self reported method through a structured questionnaire the respondents were free to reveal confidential information about their sex life. Most of the married women and those who were between ages 26-34 were more likely to use a condom. Disclosure also played a role in a condom use with couples. Women who had revealed their HIV status to their partners were likely to use condoms to protect themselves and their partners.

In another study in South Africa on fertility intentions of people living with HIV, an equal proportion of women (55%) and men (43%) reported not having any intention to have children (Cooper, et al, 2009). Men and women also expressed different intentions to have children. Greater intentions to have children were associated with being male, having fewer children of their own and being on antiretroviral therapy. Women on HAART had greater intentions of having children in future Cooper,et al, 2009). Some factors were seen as deterrents for future childbearing. Women's deterrent factor was HIV-related health reasons for 32% of women by fearing pregnancy could cause the HIV condition to worsen. Twenty one percent of the men reported not wanting to have more children because they had enough children of their own. Exploring these issues in the context of the present study will provide a comparative data and help in understanding the Namibian situation.

## **CHAPTER 3: RESEARCH METHODOLOGY**

### **3.1 Introduction**

In this chapter, the process and methods used to conduct the study will be presented. It covers the following: the research design, study population, data collection and analysis, validity and rigour and ethical consideration.

### **3.2 Research design**

Terre Blanche, Durrheim & Painter (2006:36) define a research design as ‘a strategic framework for action that serves as a bridge between research questions and the implementation of the research’. It thus refers to the research approach to be taken.

This study is a descriptive cross-sectional study assessing the elements of knowledge, attitude and behaviour of HIV positive women towards family planning service. A descriptive study aims to describe a phenomenon (Terre Blanche, Durrheim & Painter, 2006). This study aims to describe the personal and socio-demographic characteristics of HIV+ women with regards to their knowledge, perception and behaviour towards contraception and family planning. Descriptive cross sectional studies measure exposure and outcome at the same time and cannot always distinguish whether the outcome preceded the exposure. However, for factors that remain unaltered over time such as sex, race and religion, the cross-sectional survey can provide evidence of statistical association. Cross-sectional studies are useful for highlighting association rather than hypothesis testing (Hennekens and Buring, 1987). The study used a positivist approach and quantitative method to address the research question based on the premise that human beings are rational individuals, who are governed by social laws, and that causes produce effects under certain conditions and predictions are limited by the occurrence of such conditions (Sarantakos, 1993).

The choice of the study design was informed by the need to have a snap shot of the prevailing situation regarding the family planning practices among women living with HIV/AIDS. Quantitative research is appropriate in situations where there is pre-existing knowledge which allowed for the use of a standardized structured questionnaire. The health care providers and planners will be able to use the information for planning and design appropriate programs.



The weakness of the descriptive study is that it could be difficult to identify causal risk factors which could assist in designing interventions to address the problem but nevertheless provides a snap-shot of the issues.

Cross sectional studies are easy and economical. It is useful for investigating exposures with fixed characteristics. Furthermore the data from cross sectional studies are helpful in assessing the health care needs of populations (Beaglehole, Bonita & Kjellstrom, 1997). The type of the research question to be answered with this research was at level one and the descriptive and cross sectional survey provided answers to what the HIV positive women knew, believed and thought about the problem of family planning.

### **3.3 Study population**

Katzenellenbogen (1997:74) defines study population as the group you want to gather information and make conclusions from. Such a group should be clearly defined with regard to place and time and other factors relevant to the study. The study population for this study consisted of all HIV positive pregnant women attending the antenatal clinic at Oshakati Health Centre and enrolled in the PMTCT programme from October to December 2009, from which the sample was selected.

### **3.4 Sampling**

Sampling refers to the process of selecting the subjects from the total population in order to obtain information regarding a phenomenon in a way that represents the population of interest (Brink, 1999). Simple random sampling was used to select the participants. This is the type of sampling where each individual in the study population has an equal chance to be selected from the sample (Katzenellenbogen, 1999). The sample size was estimated based on the number of women enrolled in the PMTCT register and was adjusted to take care of refusals and other reasons that made the women unable to participate. The PMTCT register was used as the sampling frame. The nurses at the antenatal clinic assisted in providing the register to enable the selection of the women.

The inclusion criteria of the study participants were:

- Women who are HIV positive and enrolled in the PMTCT programme.
- Women who attended ANC at Oshakati Health Center.
- Women aged fifteen years and older.
- Women who agreed to be interviewed.

Those who did not meet the criteria were excluded from the study.

The sample size is influenced by the confidence we need to have in the data, the level of certainty that the characteristics of the data collected represent the total population of the HIV positive women, the margin of error that can be tolerated and the type of analyses that are going to be undertaken (Sanders, Lewis & Thornhill, 2003). The study was conducted at an antenatal clinic where counselling is done and where it has been estimated that 90% of the women counselled as part of the PMTCT agree to undergo HIV test. Very few refusals have been experienced in the past. The study participants were recruited with the help of the health workers running the antenatal clinic. A high level of refusal for the study was therefore not anticipated. For this study an estimated minimum response rate of 70% was used.

**Sample size calculation:**

At 95% level of certainty and 5% margin of error using an estimated response rate of 70%, and PMTCT enrolment of 140 HIV+ women in the last six months in the antenatal clinic, the minimum sample size was 79. Actual sample size was:

$$N_a = \frac{N \times 100}{Re\%}$$

Re%

Where N = Minimum sample size

Re% = Response rate

Actual sample size is then  $\frac{79 \times 100}{70}$

70

= 113

A total of 115 study participants were interviewed and the data from the required number of 113 respondents was analyzed. Two questionnaires were discarded because of incomplete data.

### **3.5 Data collection**

The data was collected from 22nd October – 14th December 2009 at the ANC clinic at the health centre. A structured interview using a questionnaire was used for data collection among the study population. The questionnaire was constructed to cover all relevant points as per the research objectives. The choice of the interview over other methods was informed by the need to collect all relevant information from the study participants and optimize response rate. The administration of the questionnaire was carried out by the Researcher and one trained Research Assistant. A review of the antenatal records of each participant was carried out by the interviewers to correlate the information gathered during the interviews.

The PMTCT register was reviewed to verify the patient data as part of the data triangulation to strengthen validity and reliability of the data collected. The data collection process went well although the required number of women could not be reached in the one period as estimated. Another national survey was running at the same time requiring HIV positive women attending the facility to be interviewed.

### **3.6 Validity and Reliability**

#### **Validity**

Validity refers to the degree to which the instrument measures what it is supposed to measure (Polit & Hungler, 2001:308). The structuring of the questions was done in order to measure the knowledge, attitudes and behavior of HIV positive women towards family planning services. Piloting of the questionnaire was undertaken at Ongwediva Health Centre in Oshakati district where a good number of women also receive ante-natal care. Fifteen women attending antenatal care were interviewed using the same criteria as for the study population. This was necessary to test the understanding of the items in the questionnaire and revisions carried out where necessary and ensure content validity. It is important that items in the

questionnaire are understood and measure the intended variables. After the piloting, some of the items in the questionnaire were re-worded to eliminate ambiguity and the order of some of the questions was rearranged.

### **Reliability**

Reliability refers to the consistency with which an instrument measures the attribute (Polit & Hungler, 2001). The administration of the questionnaire to the study participants were undertaken by the Researcher and one trained assistant and all items discussed and understood prior to administration of the questionnaire in order to reduce or eliminate inter-observer variability. The questionnaires were translated into the local Oshivambo language and back translated into English to ensure consistency and uniformity.

### **3.7 Data handling and Analysis**

All data collected was handled confidentially by the researcher and the research assistant. The data collected was coded and entered into the excel spread sheet. After the data cleaning the data was analyzed using Stata version 10 (Stata Corp). Descriptive analysis including the demographic variables of the respondents was done and further analysis examining correlations in the variables was undertaken. Specific factors related to the knowledge, attitude and behaviour of the study participants on the family planning services were examined and reported. Correlations were examined through use of chi-squared test and Fisher's exact test and a 95% confidence interval estimated with the level of significance set at 5%.

### **3.8 Ethical consideration**

#### **Confidentiality**

All the data collected and the survey tools were treated with strict confidentiality. Only the Researcher and the Research assistant had access to the data collected and confidentiality of the information will be maintained even after the research. The completed questionnaires

were kept securely in the office of the Researcher and access to the questionnaire and the computer used for data entry and analysis was limited to the Researcher, the assistant and the statistician.

### **Informed consent**

Informed consent was obtained from the study participants. The nature and purpose of the research and the time it will take to complete the questionnaire was clearly explained in the language easily understood by the participants. Those who agreed to participate then signed the consent form and were subsequently interviewed. Those who refused to participate were thanked and reassured that they can continue with their antenatal services.

### **Ethical approval**

Approval to conduct the study was sought from the Research and Ethics Committee of the University of Western Cape. Approval was also sought and obtained from the Research Unit of the Ministry of Health and Social Services of Namibia and the Oshana Regional Directorate of Health and Social Services at Oshakati under which the Oshakati Health Centre resorts.

### **Study Limitations**

One limitation of the study stemmed from stigma associated with HIV/AIDS that hindered some of the selected participants from agreeing to participate in the study. The psychological effect of HIV/AIDS and pregnancy may also have constituted a strain on the candidates and their willingness to participate. The hectic schedule and the work load of the antenatal clinic also hampered the participation of some of the clients in the study as they had to receive their antenatal care same day of visit and some had to go for laboratory services and receive their take-home medications.

Oshakati is predominantly an urban set up. Rural women who do not have access to care in such a centre may not have formed part of the study population and thus limit the generalization of the findings.



## CHAPTER 4: RESULTS

### INTRODUCTION

In this chapter results of the analysis of the quantitative will be presented. It will cover the demographic & social characteristics of the respondents, perception, practices and barriers towards family planning as well as suggestions to improve services.

#### 4.1 Response rate

A total of 115 participants were interviewed and data from 113 respondents was analyzed. Two questionnaires were discarded because of incomplete data.

#### 4.2 Demographic characteristics

##### 4.2.1 Age of respondents

As shown in the table and figure below the study participants consisted of 113 respondents whose age ranged from 17-42yrs with an average age of 29.8 years.

Table 5: Distribution of respondents' according to age groups

| Age of respondents | Frequency  | Percent       |
|--------------------|------------|---------------|
| <20 years          | 4          | 3.54          |
| 20-24 years        | 15         | 13.27         |
| 25-29              | 38         | 33.63         |
| 30-34              | 33         | 29.20         |
| 35-39              | 20         | 17.70         |
| >40                | 3          | 2.65          |
| <b>Total</b>       | <b>112</b> | <b>100.00</b> |

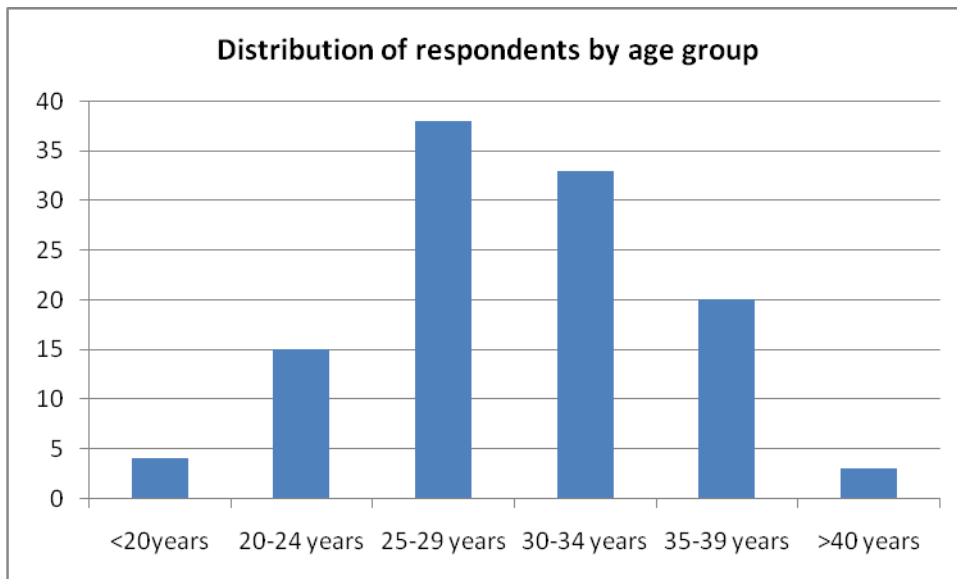


Figure 1: Distribution of respondents' according to age group

The age of the participants is consistent with reports and observations that HIV affects young people and the productive segment of the population (MOHSS, 2008). The 2008 HIV sentinel survey conducted among pregnant women in antenatal clinics found that the various age groups were affected at the following rates 15-19 (5.1%), 20-24 (14.0%), 25-29 (23.8%), 30-34 (27.2%), 35-39 (26%), 40-44 (17.7%) and 45-49 (13.8%) (MOHSS, 2008).



#### 4.2.2 Marital Status

Among the respondents 89 (78.8%) were single, while 24 (21.2%) were married. At the antenatal clinic at Oshakati Health Center this is the trend with the majority of women attending the clinic being single. This could mean that these women are free to make decisions concerning their fertility as well as accessing services without having to get approval from the spouse.

#### 4.2.3 Education

The figure below shows that out of the 113 respondents only 2 (1.8%) had no education, 14 (12.4%) had primary education only, 94(83.2%) attended secondary level of education and 3 (2.7) had tertiary level of education. The 2001 National Population and Housing census



revealed that the literacy rate in Oshana Region is high and was 89% among those 15 years and above and only 8% of that population never attended school (NPC, 2001).

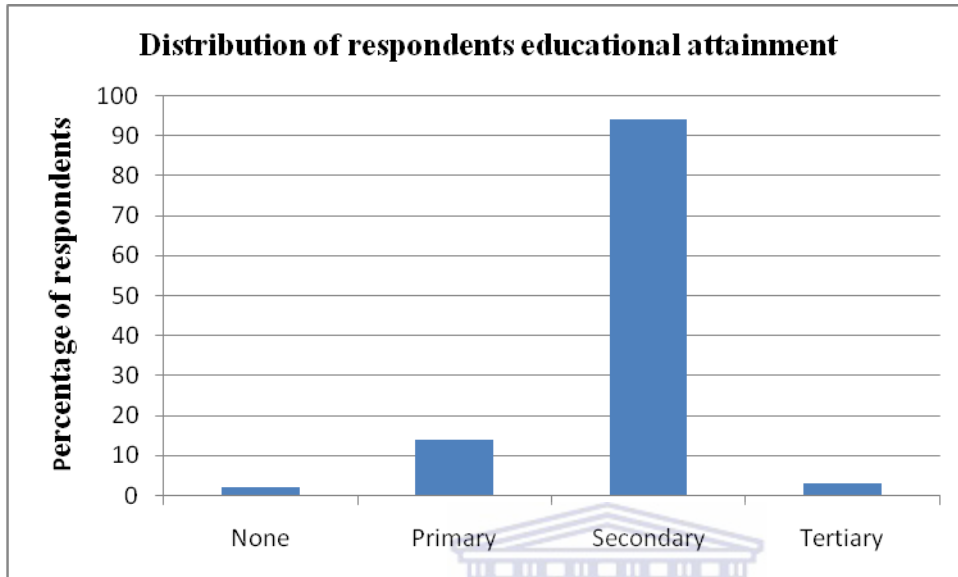


Figure 2: Distribution of respondents' by educational attainment



#### 4.2.4 Occupation

A total of 37 (32.7%) of the respondents reported being unemployed, while 26 (23.0%) were employed, 38 (33.6%) self-employed and only 12 (10.6%) were those who usually stay home and depend on subsistence farming. Generally there is high level of unemployment in Namibia and in Oshana Region in particular 35-41% of those in the labour force are unemployed, with unemployment being higher for females than males and 48.3% of the households depend on agriculture and subsistence farming as the main source of income (NPC, 2001; NPC, 2006). The occupation of the respondents has a bearing on their economic power and can impact on their ability to take care of their health and social needs as well as look after the expected newborn. The use of family planning services would be important for them to plan and space the birth of their children in order to have a better quality of life. There was no association between occupation and the utilization of services.

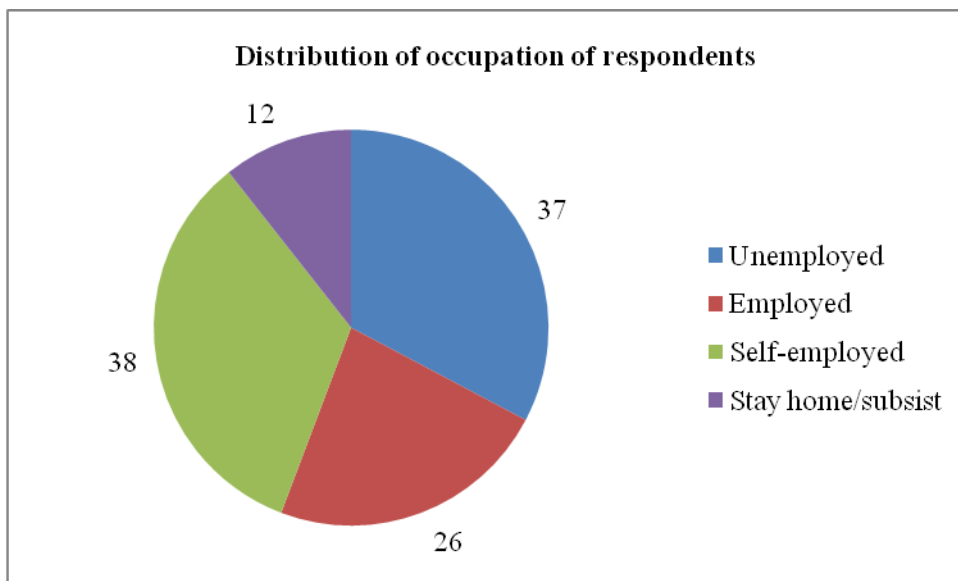


Figure 3: Distribution of respondents' according to occupational status

#### 4.2.5 Religion

Among the participants 84 (74.3%) belonged to Protestant denomination, while 27 (23.9%) were Catholics and only 2 (1.8%) were Pentecostals. This variable looked at how faith/religion could play a role on whether the respondents would accept the use of family planning services. Traditionally the Catholic faith discouraged their followers from using modern family planning methods, e.g. condoms, relying more on natural methods of family planning such as rhythm and beads. Among the respondents, out of the 60 people who used contraceptives prior to current pregnancy, 76.67% were Protestants while 21.67% were Catholics. Out of the 52 respondents who did not use contraceptives 73.08% were Protestants while 26.9% were Catholics. Further analysis of the data showed no significant association between the faith of the respondents and the use of family planning method prior to the current pregnancy ( $X^2 = 1.23$ , p-value = 0.54).

Table 6: Distribution of respondents' use of contraceptives prior to current pregnancy by religion

| Faith        | Use of Contraceptives |           | Total       |
|--------------|-----------------------|-----------|-------------|
|              | Yes                   | No        |             |
| Protestant   | 46                    | 38        | 84          |
| Catholics    | 13                    | 14        | 27          |
| Pentecostal  | 1                     | 0         | 1           |
| <b>Total</b> | <b>60</b>             | <b>52</b> | <b>122*</b> |

\* One respondent did not indicate her faith

### 4.3 Number of current children and plan to have more children

Five (4.4%) of the respondents, two of whom were aged over 40 years had already 5 or more children. Twenty two respondents (19.5%) had three to four children. Sixty one respondents (54.0%), most of who aged 20-39 years had one to two children. Twenty five respondents (22.1%) did not have any children as of the time of the study and were mainly those aged under 30 years. They were expecting their first babies.

Further analysis of the data showed significant association between the current number of children owned by the respondents and their use of family planning method prior to current pregnancy (Fisher's exact test p-value=0.006).

Table 7: Distribution of respondents' by age group and number of current children

| No of current children | 5+more   | 3-4       | 1-2       | 0child    | Total      |
|------------------------|----------|-----------|-----------|-----------|------------|
| <20                    | 0        | 0         | 0         | 4         | 4          |
| 20-24                  | 0        | 1         | 6         | 8         | 15         |
| 25-29                  | 1        | 5         | 24        | 8         | 38         |
| 30-34                  | 1        | 8         | 20        | 4         | 33         |
| 35-39                  | 1        | 7         | 11        | 1         | 20         |
| >40                    | 2        | 1         | 0         | 0         | 3          |
| <b>Total</b>           | <b>5</b> | <b>22</b> | <b>61</b> | <b>25</b> | <b>113</b> |

The respondents were asked to state their intentions regarding plan to have more children in the future.

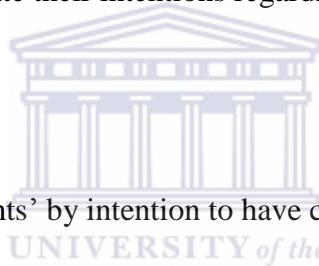


Table 8: Distribution of respondents' by intention to have children in future

|        | Frequency | Percent % |
|--------|-----------|-----------|
| Yes    | 15        | 13.27     |
| No     | 91        | 80.53     |
| Unsure | 7         | 6.19      |
| Total  | 113       | 100       |

Only fifteen (13.3%) of the respondents planned to have more children and 91 (80.5%) respondents that said they had no plans to have any more children while 7 (6.2%) respondents were not sure. The characteristics of respondents who said yes on the question whether they plan to have more children were 1 employed, 2 unemployed, 3 self-employed and 9 stay home/depend on subsistence farming; 14 had secondary school education and 1 had tertiary education. Of the 91 (80.5 %) respondents who said “No” to the plan to have more children

30 were unemployed, 21 employed, 30 self-employed and 10 stay-home and depended on subsistence farming. On the educational level 2 had no education, 14 had primary education, 73 secondary and 2 had a tertiary education. Employment status and educational level did not seem to play a role in the desire for more children among the respondents.

#### 4.4 Knowledge of HIV status

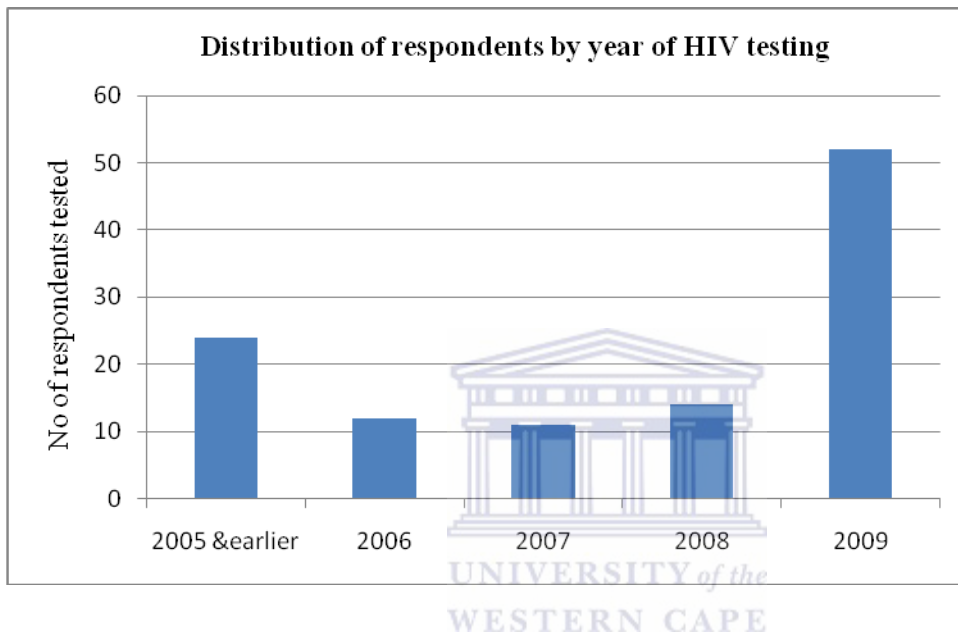


Figure 4: Distribution of respondents' according to year of HIV test

All respondents knew their HIV status. Among the respondents 52 (46%) were diagnosed with HIV + in 2009 in Ante natal care (ANC) as part of PMTCT screening programme. This group did not know about their HIV status before the pregnancy and it can have implications for the partners and the unborn babies. It is a matter of conjecture if they were to know their HIV status beforehand and the implications of pregnancy when HIV+ if they would still have ventured to become pregnant. This is the target for the second level of PMTCT programme – preventing pregnancy in HIV+ women. The remaining 61 (54%) were tested between 2008 and 2005. Only 24 (21%) respondents were tested in 2005 and earlier. The last two groups knew about their HIV status before the current pregnancy.

#### 4.5 Reason for going for HIV test

Approximately 31% of the respondents indicated that the reason for their having HIV test was because they wanted to know their status before becoming pregnant while 21% got to know their HIV status while undergoing medical examination for other reasons before they became pregnant. Of the above 31% who knew their HIV status still went ahead with the pregnancy. This indicates that a positive HIV test result is not a deterrent to pregnancy. A study by Bii et al, 2008 found that HIV infected women still went ahead to get pregnant in order to leave a legacy when they die and a child is seen as a source of comfort even when they are infected with the virus. 46% of the respondents only knew their status when they were screened during the current pregnancy, while 6 (5%) of the women gave other reasons for testing and only 1 (1%) went for the HIV test as a result of partner request. Altogether about 52.2% of the respondents who knew their HIV status prior to getting pregnant and this could be an indication that the desire for motherhood is high among HIV+ individuals, especially after commencing on ARV therapy. These are women who are referred to in table 4.1 and 4.2 with regard to their occupational status and faith. There was no association between their religion, HIV status and their desire to have children.

Table 9: Distribution of respondents' reason for HIV test

| Reason for HIV test            | Frequency  | Percent      |
|--------------------------------|------------|--------------|
| Known before current pregnancy | 35         | 30.9         |
| Medical exam before pregnancy  | 24         | 21.2         |
| ANC screen now                 | 47         | 41.5         |
| Partner request                | 1          | 0.8          |
| Others                         | 6          | 5.3          |
| <b>Total</b>                   | <b>113</b> | <b>100.0</b> |

#### 4.6 Knowledge of partner status

Among the respondents the majority (79, (70.5%)) indicated that they knew their partner's HIV status, while 33 (29.5%) did not know their partner's status. The reasons for not knowing the partner's HIV status were not explored in this study. However the findings

indicate that the majority of respondents knew their partner's status and it is also likely that their partners knew their HIV status if they had disclosed. Generally the level of disclosure to partners is not known. Partner's knowledge and involvement in care is important in providing care and support to HIV+ women. In providing care and support the partner/male involvement remains a challenge as few men attend Voluntary Counselling and Testing (VCT) services and the family planning services. Couple counselling is an important and integral part of HIV prevention, treatment and care services.

During the whole of 2009 only 128 partners of 1 485 women attending antenatal care clinic at Oshakati health centre were tested for HIV, 110 men tested HIV negative and only 17 men tested HIV positive, one result was not available (MOHSS, 2009). Most of these men were tested at the ANC. Couples are encourage to attend ANC together and get the relevant information including HIV testing for the benefit of the unborn baby. The testing is done on a voluntary basis and presents a challenge as there is no way to know whether the couples know their HIV status as to exclude discordance as only the women's HIV result is available or known at the antenatal clinic. There is not much institutional support to facilitate and encourage HIV testing for male partners, except for the invitation letters given to women to invite partners come for antenatal care with their partners.



#### **4.7 Knowledge on family planning methods**

The table below shows that most of the respondents had knowledge of the pills & injection (97.3%), condoms/femidoms (56.6%) and IUCD (43.4%), while the knowledge on other methods like natural methods and other types was limited at 8.9% and 1%, respectively Only 3 (3%) of respondents did not know about any method of family planning. The findings indicate that there was high awareness among the respondents on the types of family planning commodities available. Although awareness was high usage was low, but the reasons were not explored in this study.

Table 10: Distribution of respondents' knowledge of family planning

| Family planning type | Knew (%)   | Did Not know (%) |
|----------------------|------------|------------------|
| Pills/Injection      | 110 (97.3) | 3 (2.7)          |
| Sterilization        | 22 (19.5)  | 91 (80.5)        |
| Natural methods      | 10 (8.9)   | 103 (91.1)       |
| Condom/Femidom       | 64 (56.6)  | 49 (43.4)+       |
| IUCD                 | 49 (43.4)  | 64 (56.6)        |
| Others               | 1 (0.9)    | 112 (99.1)       |

The above table shows that the knowledge on family planning among the respondents is high. Knowledge on some methods, e.g., pills and injectables are high, while sterilization and natural methods are not that well known. This could be due to the fact that the pills and injectables are well publicised by health workers during health education on family planning. They are also culturally acceptable as opposed to the sterilization that is seen as permanent.

#### 4.8 Perception of benefits of family planning

The respondents rated the economic & biological benefits of family planning very high with 69 and 50 %, respectively. Social and other benefits of family planning were rated low at 2 and 4%, respectively. A total of 78 (69%) respondents were of the opinion that family planning provides economic benefits. Fifty seven (57%) respondents reported that there were biological benefits and only 3 (3%) respondents reported social benefits of family planning. Economic benefits refers to family planning enabling couples to reduce the burden of child upbringing through planning and spacing the child births, while biological benefits refers to the women being able to maintain and keep good health, while the social benefits helps the women to maintain her looks and social standing. Other benefits include productivity and development of the country. The high level of awareness on the biological and economic



benefits presents an opportunity to build on the knowledge to enhance behavioural change in family planning programming and education in the clinic.

Table 11: Distribution of respondents' perceptions on benefits of family planning

| <b>Benefits</b> | <b>Yes</b> | <b>No</b>  |
|-----------------|------------|------------|
| Economic        | 78 (69.0%) | 35 (31.0%) |
| Biological      | 57 (50.4%) | 56 (49.6%) |
| Social          | 3 (2.7%)   | 110 (97.3) |
| Others          | 16 (14.2)  | 97 (85.8)  |

#### **4.9 Views on dangers of family planning**

The table below shows 56 (49.6%) of the respondents stated that medical problems, such as increased bleeding, cessation of menstruation and getting lean is associated with family planning, while another 56 (49.6%) stated that family planning poses a danger due to other factors such as cancer and high blood pressure and only 1 (0.8%) of respondents referred to culture problems as family planning is blamed for infidelity and infertility. This could be an indication of lack of information on family planning and the myths around it. It could also be an indication of the shortcomings of the health education and counselling in ANC.

Table 12: Distribution of the respondents' perception on the dangers of family planning

|              | <b>Frequency</b> | <b>Percent</b> |
|--------------|------------------|----------------|
| Medical      | 56               | 49.6           |
| Cultural     | 1                | 0.8            |
| Others       | 56               | 49.6           |
| <b>Total</b> | <b>113</b>       | <b>100</b>     |

#### **4.10 Reasons why family planning should be provided to all HIV+ women**

On the question whether family planning should be provided to all HIV+ women the majority 106 (94.6%) of the respondents agreed that it should be provided. The implications of this that the vast majority will be willing to accept family planning service in future. This will require good counselling and support from the health care workers. The respondents were also asked to state their reasons for their suggestions pertaining to provision of family planning for HIV+ women. The reasons provided were as follows:



##### **Information needed**

*“Family planning services should be provided in order to inform women who don't know about family planning and are too scared to ask”*, stated a 33 year old, married respondent. Culturally in Namibia many clients do not like asking questions unless prompted. They see health workers as having all the answers. Furthermore the respondents stated that they needed to get information on family planning to make a choice on what to do and to be involved in decision making. Family planning is seen as a form of empowerment of women.

##### **Health concerns**

Some respondents indicated that it is not necessary to get children if one is HIV positive as it weakens the body through re-infection as well as to prevent more HIV. This shows that they are aware of some risks, but it did not really affect their decision to have children as some

women unfortunately only came to know their HIV status with the pregnancy. This represents unmet needs for family planning.

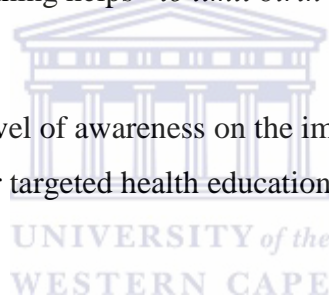
### **Unreliable condoms**

One respondent remarked that women need to know more about other methods as condoms can burst. Thus they need to get information including condom use and abstain from sex.

### **For prevention**

Some of the respondents saw family planning as a means to “*prevent getting re-infected with HIV*” as a 29 year old, single, respondent stated and “*avoid unplanned pregnancy*”. Another respondent stated that family planning helps “*to limit birth to avoid losing too much blood through childbirth*”.

It is apparent that there is a good level of awareness on the importance of family planning for HIV+ women and opportunity for targeted health education for behaviour change exists among the population.



#### **4.11 Reasons why family planning should not be provided to all HIV+ women**

A small number of 6 (5.4%) of the respondents felt that family planning should not be provided to HIV + women due to the fact that it is discriminatory to target them. Family planning should only be given with the permission of the women if she does not want any more children or to prevent pregnancy.

#### 4.12 Preferred place to get family planning counselling service

Table 13: Distribution of respondents' choice for family planning counselling

| Preferred place        | Frequency  | Present    |
|------------------------|------------|------------|
| Family planning clinic | 62         | 58.5       |
| ART/CDC clinic         | 12         | 11.3       |
| ANC/PNC                | 23         | 21.7       |
| OPD                    | 1          | 0.9        |
| Anywhere else          | 8          | 7.6        |
| <b>Total</b>           | <b>106</b> | <b>100</b> |

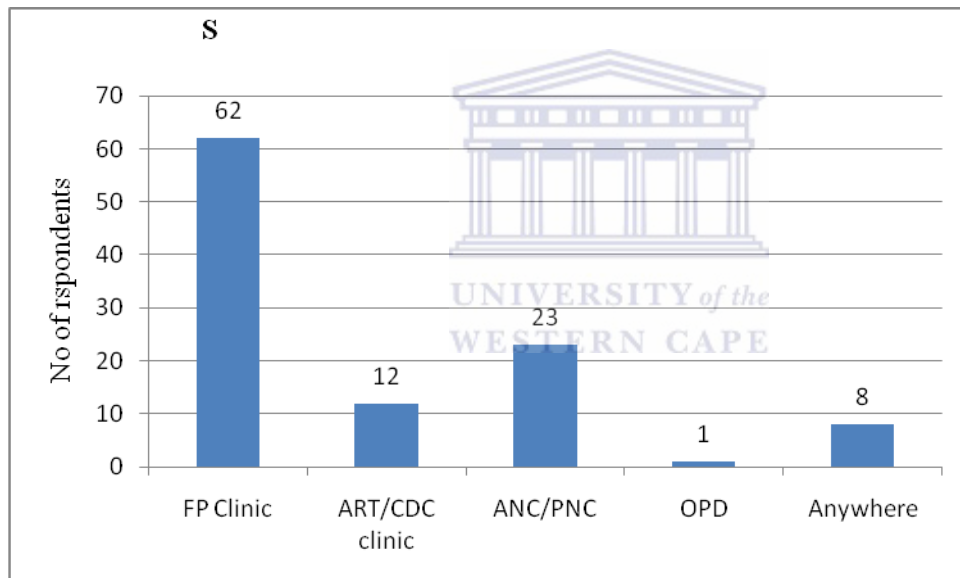


Figure 5: Distribution of respondents' by choice for family planning counselling place

The respondents had differing views on what their preferred place to receive family planning services should be. The chart shows that 62 (58.5%) of respondents indicated that family planning should be provided at the family planning clinic, 12 (11.3%) prefer to receive family planning at the ART/CDC clinic and 23 (21.7%) would prefer the ANC/PNC. Probably these groups want a more comprehensive approach to care. Less than 1(1%) indicated a preference for the Outpatient Department (OPD) and 8 (7.5%) did not have a place of preference.

Normally each health facility has family planning room where health care workers give health education and dispense the contraceptives. The ART/CDC clinics do not keep family

planning commodities. Reasons for their preference was not explored but the majority choice of family planning clinic could be from existing knowledge of where family planning services are provided or fear of discrimination if alternative places were chosen for the service.

#### **4.13 Practices regarding family planning**

A total 77 (68.1%) of respondents responded that they had used something to avoid getting pregnant, while 36 (31.9%) never used some form of family planning. However prior to current pregnancy only 60 (53.6) of respondents were using family planning. Of the 60 respondents two had 5 or more children; fourteen had 3-4 children; thirty eight had 1-2 children and six had no children. Of those who had ever used some form of family planning to avoid getting pregnant all had either used condoms/pill/injection. Among those who did not use family planning 4 (19.0%) reported that they did not do so due to family pressure, while 7 (33.3%) provided other reasons. About 10 (48%) gave no reason. The data presented here indicates that there is a huge potential for effective family planning counselling to achieve targeted objectives.



#### **4.14 Family planning counselling after knowing their HIV status**

Sixty two (54.9%) of the respondents did receive counselling on family planning after they were tested, 51 (45.1%) reported not receiving counselling on family planning. This is a surprising large number in contrast to what was expected as per counselling guidelines. Although all clients had received post-test counselling after they tested HIV positive not many could recall the particulars on family planning. On the other side the post-test counselling protocols include a short section on Family planning that encourages HIV positive clients to seek family planning services with their partners. There is no mention of the various types of family planning methods and where to access them. The script is thus not adequate for a lay counsellor to impart knowledge on family planning.

Among those who received family planning counselling, 34 (55.7%) were counselled by

Doctors and nurses, while others received it from Community Counsellors 26 (42.6%) and the other 1 (2%) from friends.

#### 4.15 Information received during family planning counselling

Table 14: Distribution of the respondents' information received during counselling

| Type of Information  | No of respondents |
|----------------------|-------------------|
| Condom use           | 50 (82%)          |
| Dual protection      | 46 (75%)          |
| Other contraceptives | 22 (36%)          |
| Drug interaction     | 1 (1%)            |
| Other information    | 9 (15%)           |

The table shows that among the 61 (98%) respondents who reported receiving information the type of information received varied. This could be that the various respondents received different types of information at each counselling session. As previously highlighted the counselling protocols varied depending on who provided the counselling. There is thus no consistency or uniformity on the information received by the clients. This could be confusing to the clients when counselled by different counsellors.

75% received counselling regarding dual protection.

82% received counselling on condom use.

36% received counselling on other contraceptives.

1% received counselling on drug interaction.

The majority of the respondents indicated they received their counselling from the Community Counsellors. The training and knowledge of community counsellors on family

planning services may be limited. The need then arises to empower them with more knowledge and skills to deliver effective family planning counselling services in addition to greater involvement of the Doctors and the Nurses in family planning counselling for HIV+ women.

#### 4.16 Use of family planning method prior to current pregnancy

A total 60 (53.6%) of the respondents reported having used family planning before current pregnancy, while 46.4% did not use any family planning. There was a significant association between the use of family planning method prior to current pregnancy and the parity of the respondents (Fisher's exact test p-value 0.009).

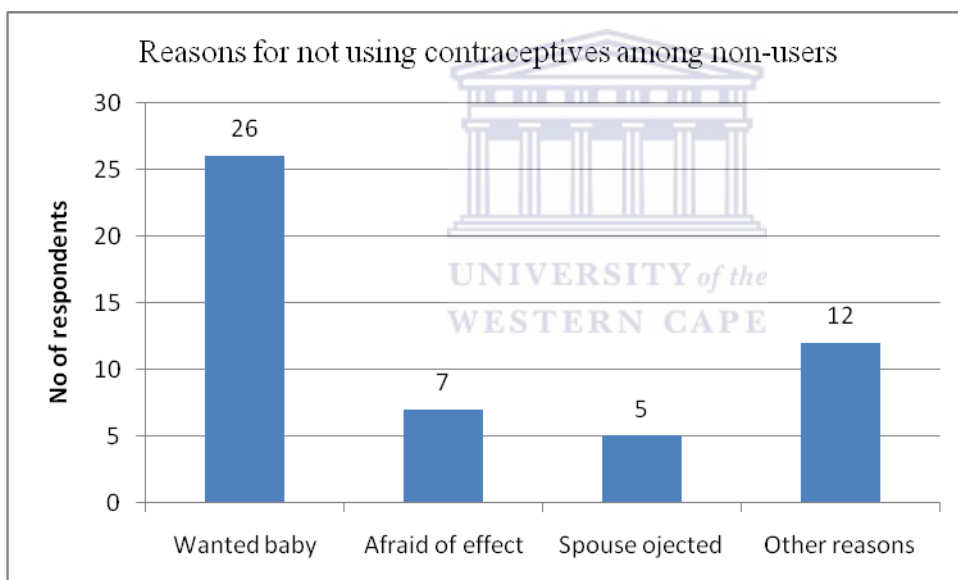


Figure 6: Distribution of respondents' reasons for not using contraceptives

Among the 52 respondents who did not use any family planning method prior to the current pregnancy 26 (52.0%) reported that they did so because they wanted a baby, 5 (10%) the spouse objected to family planning, 7 (14%) were afraid of the side effects of contraceptives and 12 (24%) did not give a reason for not using a family planning method or cited personal beliefs and culture.

The almost equal proportion of respondents who indicated that they used or did not use family planning method prior to current pregnancy and the reasons given by non-users

indicates an opportunity to strengthen family planning counselling in the ART and family planning clinics. Their need to have a baby should be respected and supported.

#### 4.17 Intention on use of contraception

The views of the respondents were sought regarding their intentions regarding use of contraceptives after the current pregnancy: 98 (88%) indicated that they intend to use family planning after the current pregnancy, while 3 (2.7%) said that they were not sure. The reasons for the respondent's intention to use family planning were not discussed. Perhaps it could be that they had more information now at their disposal. Capitalizing on this huge opportunity to improve the delivery of family planning services in the health centre will go a long way to improve the quality of life for people living with AIDS.

#### 4.18 Rating of family planning service for people living with HIV at Oshakati Hospital

Only 100 out of the 113 respondents rated the services as indicated below.

Table 15: Distribution of respondents' rating of family planning services

| Service                         | Poor   | Satisfactory | Good     | Excellent |
|---------------------------------|--------|--------------|----------|-----------|
| Waiting time                    | 1 (1%) | 10 (10%)     | 38 (38%) | 51 (51%)  |
| Privacy                         | 0      | 6 (6%)       | 42 (42%) | 52 (52%)  |
| IEC materials                   | 3 (3%) | 4 (4%)       | 40 (40%) | 53 (53%)  |
| Interaction with Health workers | 3(3%)  | 8 (8%)       | 41 (41%) | 51 (51%)  |

The ratings indicate a general satisfaction by the respondents with the services provided at the health centre, although there is still room for improvement to ensure all who access services at the centre go home satisfied.

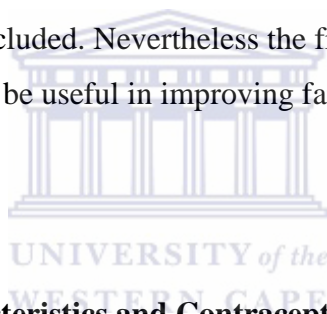


## **CHAPTER 5: DISCUSSION, CONCLUSION AND RECOMMENDATIONS**

The previous chapter covered the method used for data analysis, presentation of findings of results. This chapter will present a discussion of the findings, conclusion and recommendations from the study.

### **5.1 DISCUSSION**

The study was a cross sectional study aimed to determine the critical elements of attitude, knowledge and behaviour of pregnant HIV+ women towards family planning service. The setting was in an urban health centre though the study population cuts across the urban and rural populations. The findings from the study may be difficult to generalize to the whole population as the study population included only those who were enrolled in the PMTCT programme and those who do not access services in such environment or who were not pregnant or health-seeking are excluded. Nevertheless the findings have revealed some interesting information that could be useful in improving family planning services for people living with HIV/AIDS.



#### **5.1.1 Socio-demographic characteristics and Contraceptive Use**

The respondents' age ranged from 17-42 years with an average of 29 years. The demographic characteristics of age, faith, occupation, education and marital status did not play a role in the use of family planning method. The respondents were mostly single with a secondary level of education, which were predominantly unemployed. Among the population in Oshana Region 63 % of those aged 15 years and above are those who never married while 20% are married with certificate and 4% are married traditionally (NPC, 2001). While marriage and cohabitation are generally considered primary indicators of exposure to the risk of pregnancy, many women in Namibia bear children outside of marriage (MOHSS & Macro International, 2008). The data showed that most of the respondents were those who had attain secondary school level either completed or dropped out due to poor academic performance. Attainment of this level of education enhances general literacy and could be considered a factor in the understanding of key messages related to HIV transmission and use of family planning services. Analysis of the data showed that there was however no association between

educational status and ever using contraceptives among the respondents (Fisher's exact test p-value =0.95). Understanding of a message alone may not lead to behavioural change as other factors that influence message recipient's reaction may be crucial in this regard.

### **5.1.2 Knowledge of HIV status and use of contraceptives**

All respondents knew their HIV status; however 46% came to know their status during the current pregnancy, a further 52% knew it before the current pregnancy. A study in Zimbabwe found that most HIV-infected women do not know their HIV status before they got pregnant and only found out their status in the antenatal clinic while 31% became pregnant after their diagnosis (FHI, 2001).

Voluntary counselling and testing in the general population is important to identify the people who are infected with HIV in order for them to access care and support. Integrating VCT in family planning will increase access to quality HIV and family planning service instead of standalone VCT (FHI, 2001). There was a high level of awareness on contraceptive methods among the respondents as 97.3% were aware of pills or injections as a contraceptive method and only 2.7% did not know of any method of family planning. The finding is similar to the report by Megeid, Sheik, El Ginedy and El Araby from Egypt in 2007 that majority of the study participants knew about contraceptives. However actual use of contraceptives among the respondents in this study was relatively low as only 68% had ever used a contraceptive and only 53.6% were actually using contraception before the current pregnancy and 46.4% did not use. The study from Egypt also reported that only 69% of the participants were actually using contraceptives.

### **5.1.3 Desire for children among HIV+ women**

The main reasons cited by the respondents for not using contraceptives were that they wanted a baby (52%), spouse objected (10%), afraid of effects (14%) or other reasons such as beliefs and culture (24%). The number of children presently owned by the respondents was significantly correlated with the desire to have more children and those who had none or few children were likely not to use contraceptives prior to current pregnancy and indicated their

desire to have children. The figures compares to the findings in the 2006/7 DHS which reported that 47% of all women were not using contraceptives because of fertility desires. 23% did not use because of concerns with the contraceptive method and 9% did not use because of general opposition to use (MOHSS & Macro international, 2008).

It is not uncommon for people living with HIV to express their intentions to have children in future. In a South African study done in Cape Town among women and men living with HIV, an equal proportion of women (55%) and men (43%) reported having no desire to have children, while the other half expressed their intentions to have children, that is 45% of women and 57% of men (Cooper, et al,2009).The above study gave both women and men a chance to express their intentions. The study reported that greater intentions to have children were associated with being male, having fewer children, living in an informal settlement and the use of antiretroviral therapy. The women's intentions to have children were associated with being in a sexual relationship, having fewer children and having a partner who is not the biological parent of their children (Cooper, at al, 2009).

The finding is similar to other findings from the literature where 28-29% of HIV infected men and women receiving medical care in the United States desire children in future. Among those desiring children, 69% of women and 59% of men actually expect to have one or more children in the future (Chen, et al, 2001).

The reasons why many HIV-infected women desire to have children are many. Some seek to have children to fulfil their motherhood desires and self esteem, some want to replace a child lost to AIDS while others see pregnancy as the hope and link to the future as a dying woman can find consolation in the healthy child she leaves behind (FHI, 2001)

#### **5.1.4 Family Planning Counselling after HIV test and use of contraceptives**

Family planning counselling after being diagnosed HIV+ did not seem to influence the respondent's use or non-use of contraceptives prior to current pregnancy (FHI, 2001). About 54.8% of respondents indicated that they had family planning counselling, while 45.1% did not receive any counselling after they were tested HIV+. From those who received counselling they were counselled by the Doctor/nurses (55.7%), Community Counsellors (42.6%) and only 1% were counselled by friends.

The majority (68%) indicated that they had ever used something in the past to avoid getting pregnant; they had either used a condom or pill and injection. The level of education, religion or marital status of the respondents did not play a significant role in their use of contraceptives. Myers and his colleagues however report that other factors independently associated with increased risk of incident pregnancy included younger age, lower educational attainment, being married or cohabiting and having a partner equally enrolled in the programme(Myers et al., 2010).

The findings are similar to the findings by Stephenson & Hennik (2003) who found similar barriers among the rural poor in Pakistan. However a study from India by Kanniappan, Jeyapaul and Kalyanwala (2008) revealed that the main factors that distinguished women who wanted to have a child and those who did not want were their levels of anxiety about the future and if they had family support.

It seems the quality of family planning counselling received does not appear to have been adequate. Quality of care in this context refers to the provision of high family planning services to all clients. It can be judged by: the range of choice of contraceptive methods, completeness of the information given to clients and the technical competence of the provider (Engender Health,2003). Majority of the respondents indicated they lack adequate information for informed choices on family planning services. The finding is significant as Cates (2001) point out, HIV+ women need proper counselling as the method must be highly effective and carry low risk of partner to woman HIV transmission and vice versa.

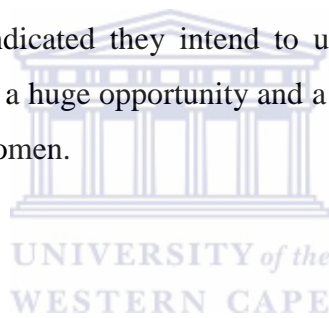
## **5.2 CONCLUSION**

The study has highlighted that majority of HIV+ women who become pregnant in Oshakati are generally aware of contraceptives but many of them do not use contraceptives due to a desire to have babies or because of spousal disapproval or fear of the effect of contraceptives. Most of them are single, unemployed and knew their HIV status prior to becoming pregnant. It might be that the quality of counselling they received at diagnosis of their HIV may not have been adequate as the Community Counsellors who are not well trained in family planning counselling provided almost half of the counselling post-test. The strength of the current system lies in the fact that all women attending antenatal clinic are tested and knew

their HIV status and can access care throughout the pregnancy period and beyond. Spousal involvement in PMTCT services appears limited.

Structuring the health service to address the information needs of the community and empower HIV+ women and their partners will go a long way to improving the quality of their lives.

Most of the respondents indicated that they were generally satisfied with the family planning service at Oshakati Hospital with regard to waiting time, privacy and the interaction with the health care workers. Most would still prefer family planning services to be rendered in the Family Planning clinic though some would prefer it at the ART/CDC clinic. What is crucially important is that family planning services are integrated, comprehensive and accessible to PLWA (USAID, 2004; FHI, 2004; Adamchak, Wilcher and Aradhya, 2010). Indeed as about 88% of the respondents have indicated they intend to use family planning services after delivery of the current pregnancy a huge opportunity and a challenge is presented to meet the family planning needs of these women.



### **5.3 RECOMMENDATIONS**

The following recommendations are made based on the results from the study. It is hoped that these recommendations could help address some of the barriers that women face accessing and utilizing family planning services.

#### **1. Encourage women and couples to know their HIV status before pregnancy.**

Forty two percent (42%) of the women came to know their positive HIV status during the current pregnancy. This could come as a surprise to them as they had to make a decision on the PMTCT and future family planning choices. Women of child bearing age should be encouraged to know their HIV status through the existing programmes of Voluntary Counseling and Testing (VCT), Provider Initiated Counseling and Testing (PICT), Couple HIV Counseling and Testing (CHCT) and the National HIV testing days. This will afford women and couples the chance to know their HIV status. An intensive campaign by the

Ministry of Health and Social Services and its allies in the HIV/AIDS care, treatment and prevention services is needed.

## **2. Provide continuous education and counselling to reinforce correct family planning messages.**

The majority of women had used something to avoid getting pregnant and the awareness of family planning is high, but believes that family planning cause medical problems. There is thus a need for the Ministry of Health and Social Services and its partners such as UNFPA to develop positive family planning messages to counter act the myths that family planning causes medical problems.

## **3. Integrate family planning and HIV services**

Ninety five percent (95%) of the respondents stated that family planning counselling should be provided to all HIV+ women and prefer to receive family planning methods in the Family planning clinic with other clients (58%), ANC/PNC (22%) and ART/CDC clinic (11%). The remaining 8 % did not indicate any preference were to get their family planning. People seeking HIV services often share common needs with those seeking family planning services and integrating these two services would enable health workers to serve their clients more comprehensively. An appropriate model of integration should be worked out and implemented in both the public and private health facilities. The management of the health centre and the District health services management as well as the Regional Directorate of the Ministry should jointly work out a suitable model for the facility, including the clinic and non-clinic venues.

## **4. Involve People living with HIV AIDS in family planning decisions**

People living with HIV can have a powerful voice to advocate for family planning among themselves through the existing committees at the ART clinic as consumers. Involvement breeds empowerment and as has been reported, use of contraceptives could only be more successful if women made the choice themselves. The various support groups existing in the

country should be actively involved by the Ministry of Health and Social Services in decisions regarding family planning programming in the country.

#### **5. More research is needed on fertility intentions of HIV positive couples in the district**

More research is needed to get the view of both men and women on their fertility intentions as the study only targeted pregnant HIV positive women. A population based research is hereby suggested. Other research areas highlighted from this study could be the socio-cultural factors that impact on use of contraceptives by HIV+ people and the role of stigma and discrimination in contraceptives choices and use by PLWA as well as ways and means of male partner involvement in PMTCT services.



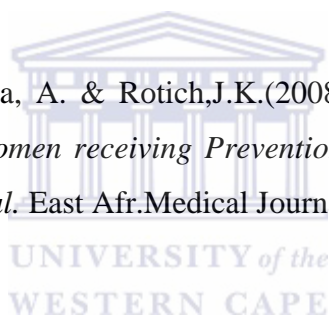
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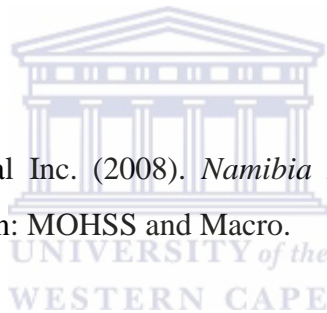
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## 7. APPENDICES

### APPENDEIX 1: INFORMATION SHEET



## UNIVERSITY OF THE WESTERN CAPE

*Private Bag X 17, Bellville 7535, South Africa*

*Tel: +27 21-959, Fax: 27 21-959*

**E-mail:**

**Project Title:** Attitude, perceptions and behaviour towards Family planning amongst HIV-positive women attending PMTCT services at Oshakati intermediate Hospital, Namibia

This is a research project being conducted by Mrs. Alma Akpabio at the Oshakati Intermediate Hospital. I am a student at School of Public Health, University of Western Cape. As part of my studies for Masters in Public Health I am required to conduct a research. I will be focusing on Prevention of Mother to Child HIV Transmission (PMTCT). We are inviting you to participate in this research project to share your experiences and perceptions of family planning among HIV+ women. In Namibia the HIV prevalence rate is 17.8 % among the reproductive age group 15-49 years, with the age group between 30-34years being the highest affected at 27.1%. As pregnant woman living with HIV you have unique reproductive health needs, including for family planning services. Not much information is available on the attitude, perceptions and behavior of HIV positive women on family planning. The purpose of this research project is to to assess the attitude, perceptions and behaviour about family planning practices among HIV-positive women attending ante-natal clinic in Oshakati Hospital. The study will also assess the availability of family planning and counseling services rendered to HIV-positive women at the family planning and antenatal clinics at Oshakati Hospital. The findings will help us to improve the services for people living with HIV/AIDS on family planning.

You will be asked to give written consent after the purpose and the implication of the study has been explained to you. During the interview I will be asking some questions concerning your health, pregnancy and family planning. The individual interview may take between 40-60 minutes.

Some of the information requested is quite personal. If there is anything that you would prefer not to discuss, please feel free to say so. Please answer the questions as honestly as possible; the information

will be treated confidentially. The survey is anonymous and your name won't be recorded. I will really appreciate if you could participate in the interview but you are free not to participate and that will never affect your coming for services in this hospital.

**Voluntary participation and withdrawal**

Your participation in this research is entirely voluntary that is you do not have to participate. If you choose to participate, you may stop at any time. You will not be paid for participating in this study. However the information you will give us will help us to improve services. If we write a report or article about this research project, your identity will be protected to the maximum extent possible.

Do you have any question about the study?

Do you agree to be interviewed?

Yes

No



My contact details are:

Mrs. Alma Akpabio

Oshakati Regional Health Training Centre

Oshakati Hospital

Tel. 065 2233126

Signed: .....

Mrs. A.Akpabio

I am accountable to my supervisor: Dr. Thubelihle Mathole who is contactable at c/o SOPH fax: 021 959 2872 Or by e-mail at tmathole@uwc.ac.za

## APPENDIX 2: INFORMED CONSENT FORM



**UNIVERSITY OF THE WESTERN CAPE**

*School of Public Health*



Private Bag X17 • **BELLVILLE** • 7535 • South Africa

Tel: 021- 959 2809, Fax: 021- 959 2872

### **Informed Consent:**

#### **Title of the research**

Attitude, perceptions and behaviour towards Family planning amongst HIV-positive women attending PMTCT services at Oshakati intermediate Hospital, Namibia



As was mentioned in the Participants Information Sheet: your participation in this research is entirely voluntary. Refusal to participate or withdrawal from the study will not result in penalty or any loss of benefits to which you are otherwise entitled. If you choose to participate, you may stop at any time. You may also choose not to answer particular questions that are asked in the study. If there is anything that you would prefer not to discuss, please feel free to do so. The information collected in this interview will be kept strictly confidential. If you choose to participate in this study, your signed consent is required before I proceed with the interview with you.

.....

I have read the information about this research study on the participant information sheet, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have asked have been answered to my satisfaction.

I consent voluntarily to be a participant in this project and understand that I have the right to end the interview at any time, and to choose not to answer particular questions that are asked in the study.

My signature says that I am willing to participate in this research.



---

Participant name (Printed)

---

Participant signature

---

Consent date

---

Researcher Conducting informed consent (printed)

---

Signature of Researcher

---

Date

---

Signature of Witness

---

Date



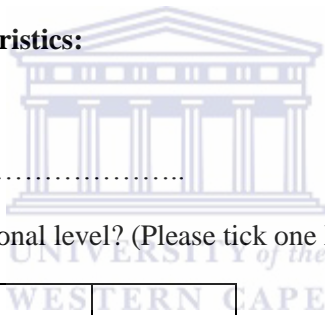
## APPENDIX 3: INTERVIEW QUESTIONNAIRE

Questionnaire no.:.....

*The questionnaire will be administered to HIV positive women who are 15years and older attending PMTCT services.*

|   |
|---|
| <p>Name of Health facility: .....</p><br><br><p>Name of interviewer: .....Signature -----</p> |
|---|

### A. Demographic & Social characteristics:



1. How old are you? .....
2. What is your highest educational level? (Please tick one X)

|    |                     |  |
|----|---------------------|--|
| 1. | No education        |  |
| 2. | Primary Education   |  |
| 3. | Secondary Education |  |
| 4. | Tertiary Education  |  |
| 5. | Others              |  |

3. What is your current marital status?

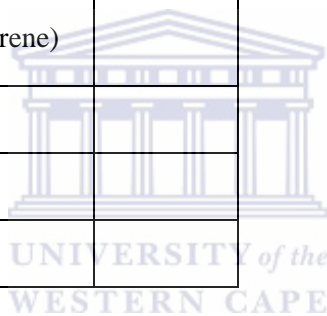
|    |                    |  |
|----|--------------------|--|
| 1. | Single             |  |
| 2. | Married            |  |
| 3. | Divorced/Separated |  |
| 4. | Widowed            |  |
| 5  | Others (specify)   |  |

4. What is your occupation?

|    |                                    |  |
|----|------------------------------------|--|
| 1. | Unemployed                         |  |
| 2. | Employed                           |  |
| 3. | Self employed                      |  |
| 4. | Stay at home/ subsistence farming. |  |
| 5. | Student                            |  |
| 6. | Others                             |  |

5. Which church do you attend or which faith do you practice?

|    |   |  |
|----|---|--|
| 1. | Protestant(Anglican, Lutheran, 7 <sup>th</sup> day, Nazarene) |  |
| 2. | Roman catholic  |  |
| 3. | Pentecostal   |  |
| 4. | Others (specify pls)  |  |



6. How many children do you currently have?

|    |            |  |
|----|------------|--|
| 1. | 5 and more |  |
| 2. | 3-4        |  |
| 3. | 1-2        |  |
| 4. | 0          |  |

7. Do you plan to have more children?

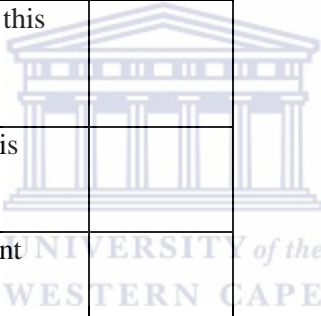
|    |          |  |
|----|----------|--|
| 1. | Yes      |  |
| 2. | No       |  |
| 3. | Not sure |  |

8. When where you tested for HIV?

|    |                  |  |
|----|------------------|--|
| 1. | 2009             |  |
| 2. | 2008             |  |
| 3. | 2007             |  |
| 4. | 2006             |  |
| 5. | 2005 and earlier |  |
| 6. | Do not know.     |  |

9. What made you to go for HIV testing?

|    |                                      |  |
|----|--------------------------------------|--|
| 1. | Wanted to know before this pregnant. |  |
| 2. | Medical exam before this pregnancy.  |  |
| 3. | ANC screening at present pregnancy.  |  |
| 4. | Partner husband wanted testing.      |  |
| 5. | Others                               |  |



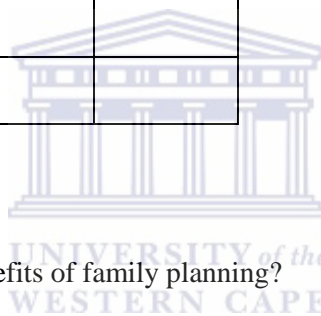
10. Was your partner/ husband also tested for HIV?

|    |     |  |
|----|-----|--|
| 1. | Yes |  |
| 2. | No  |  |

## B. Perceptions about family planning

11. What methods of family planning do you know?

|    |   |  |
|----|---|--|
| 1. | Contraceptive: pill, injection                                  |  |
| 2. | Contraceptive: male/female sterilization                        |  |
| 3. | Natural methods: periodic abstinence, withdrawal, breastfeeding |  |
| 4. | Condom/femidom use  |  |
| 5. | IUD   |  |
| 6. | Others  |  |
| 7. | Does not know   |  |



12. In your opinion what are the benefits of family planning?

|    |  |  |
|----|--|--|
| 1. | Economic (helps reduce the burden of child upbringing)             |  |
| 2. | Biological (helps the woman to keep good health)                   |  |
| 3. | Social (helps the woman to maintain her looks and social standing) |  |
| 4. | Other (specify)  |  |

13. What do you think are the dangers of using family planning?

|    |   |  |
|----|---|--|
| 1. | Medical reasons (might affect her health) |  |
| 2. | Cultural beliefs                          |  |
| 3. | Religious beliefs                         |  |
| 4. | Others                                    |  |

**C. Attitude towards family**

14. Do you think family planning should be provided to all HIV+ women?

|    |     |
|----|-----|
| 1. | Yes |
| 2. | No  |

15. If no to Question 14, under which conditions should family planning be made available.

16. If yes, why do you think so?



17. What would your preferred place be to get counseling on family planning.

**D. Practices regarding family planning.**

18. Have you and your partner ever used something to avoid getting pregnant?

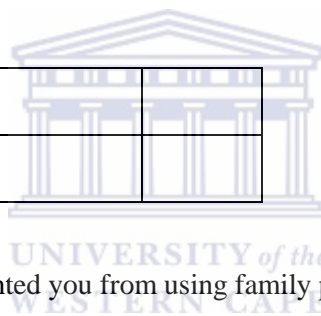
|    |     |  |
|----|-----|--|
| 1. | Yes |  |
| 2. | No  |  |

19. If yes in question 18 what did you use?

|    |   |  |
|----|---|--|
| 1. | Contraceptive: condom, pill, injection                          |  |
| 2. | Contraceptive: male/female sterilization                        |  |
| 3. | Natural methods: periodic abstinence, withdrawal, breastfeeding |  |
| 4. | Others  |  |

20. Did you use the method for family planning and also to protect against sexually transmitted infections?

|    |     |  |
|----|-----|--|
| 1. | Yes |  |
| 2. | No  |  |



21. If no to Question 20, what prevented you from using family planning?

|    |   |  |
|----|---|--|
| 1. | Culture                                     |  |
| 2. | Religion                                    |  |
| 3. | Family pressure (husband, in-laws, partner) |  |
| 4. | I don't know                                |  |
| 5. | Others                                      |  |

22. Did you receive any family planning counseling after you were tested HIV positive?

|    |     |  |
|----|-----|--|
| 1. | Yes |  |
| 2. | No  |  |

23. If yes, from whom?

|    |                      |  |
|----|----------------------|--|
| 1. | Doctor, nurses       |  |
| 2. | Community Counsellor |  |
| 3. | Friends              |  |
| 4. | Others               |  |

24. What information did you receive?



|    |                                       |  |
|----|---------------------------------------|--|
| 1. | Dual protection                       |  |
| 2. | Condom use                            |  |
| 3. | Other contraceptives                  |  |
| 4. | Drug interaction with contraceptives. |  |
| 5. | Others                                |  |

25. Were you using any family planning method before you got pregnant with this pregnancy?

|     |  |
|-----|--|
| Yes |  |
| No  |  |

26. If no, what made you not to?



|    |                                    |  |
|----|------------------------------------|--|
| 1. | Wanted to have baby                |  |
| 2. | Spouse did not accept              |  |
| 3. | Against cultural belief            |  |
| 4. | Against Religious belief           |  |
| 5. | Was afraid of effect on her health |  |
| 6  | Others (specify)                   |  |

27. After the current pregnancy do you intent to have use contraceptives in future?

|          |  |
|----------|--|
| Yes      |  |
| No       |  |
| Not sure |  |



28. If no in Question 27, what are the reasons for not using contraceptives?

|    |                                |  |
|----|--------------------------------|--|
| 1. | Wanted to have more baby       |  |
| 2. | Spouse will not accept         |  |
| 3. | Against cultural belief        |  |
| 4. | Against Religious belief       |  |
| 5. | Afraid of effect on her health |  |
| 6  | Others (specify)               |  |

**E. Barriers to family planning**

29. In your experience what are the barriers for effective utilization of Family planning services for persons living with HIV?

|    |                                  |  |
|----|----------------------------------|--|
| 1. | Inadequate information           |  |
| 2. | Long distance to health facility |  |
| 3. | Family pressure                  |  |
| 4. | Others (specify)                 |  |

30. How do you rate the services for family planning for people living with HIV in this hospital?

|   | Poor | Satisfactory | Good | Excellent |
|---|------|--------------|------|-----------|
| Waiting time                                    |      |              |      |           |
| Privacy   |      |              |      |           |
| Information education materials                 |      |              |      |           |
| Interaction of Health Care Workers with clients |      |              |      |           |



Comment:

.....

.....

.....

**F. Suggestion to improve services**

30. What suggestions do you have to improve services for women who are HIV positive with regard to family planning?

.....

.....

Thank you for your time.

## Appendix 4: Permission to conduct study





## REPUBLIC OF NAMIBIA

### Ministry of Health and Social Services

Private Bag 13198  
Windhoek  
Namibia

Ministerial Building  
Harvey Street  
Windhoek

Tel: (061) 2032562  
Fax: (061) 272286

E-mail: [hilmanangombe@yahoo.com](mailto:hilmanangombe@yahoo.com)

Enquiries: Ms. H. Nangombe Ref.: 17/3/3/AP

Date: 13 October 2009

#### OFFICE OF THE PERMANENT SECRETARY

Ms. A. Akapabio  
P. O. Box 1251  
Ondangwa  
Namibia



Re: Study, perceptions and behaviour towards family planning services amongst HIV+ women attending PMTCT services at Oshakati Intermediate Hospitals, Namibia.

1. Reference is made to your application to conduct the above-mentioned study.
2. The proposal has been evaluated and found to have merit.
3. Kindly be informed that approval has been granted under the following conditions:
  - 3.1 The data collected is only to be used for academic purpose;
  - 3.2 A quarterly progress report is to be submitted to the Ministry's Research Unit;
  - 3.3 Preliminary findings are to be submitted to the Ministry before the final report;
  - 3.4 Final report to be submitted upon completion of the study;
  - 3.5 Separate permission to be sought from the Ministry for the publication of the findings.

Yours sincerely,

  
MR. K. KAHUURE  
PERMANENT SECRETARY





UNIVERSITY *of the*  
WESTERN CAPE