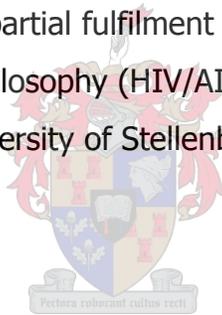


**THE KNOWLEDGE OF PREVENTION OF MOTHER TO CHILD TRANSMISSION
AMONG PREGNANT WOMEN AT MABOTE CLINIC, TSEPONG, LESOTHO AFTER
VOLUNTARY COUNSELLING AND TESTING**

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degree of Master of Philosophy (HIV/AIDS Management) at the
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DECLARATION

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SUMMARY

Background

Voluntary counselling and testing in prevention of mother-to-child transmission (PMTCT) has an important role to play in Lesotho's response to the Human Immunodeficiency Virus (HIV) epidemic among women of childbearing age. In fact, the cornerstone of a successful PMTCT programme is a high level of HIV testing among pregnant women in order to identify who are positive and at risk of transmitting the virus to their babies. For effective PMTCT, there is a need to integrate voluntary counselling and testing (VCT) into antenatal care and maternity care, rather than providing it through a separate VCT unit. There is also a need to understand that counselling and HIV testing must be confidential and voluntary, and the qualities of these services have a high impact on the uptake of voluntary counselling and testing services.

Aim

This study is aimed at establishing the current knowledge of PMTCT among pregnant women who attend counselling in order to improve counselling services and transmission of HIV among them during pregnancy at Mabote Clinic, Tsepong in Lesotho.

Method

A well-structured questionnaire was administered to thirty (30) women registering for the first time for antenatal care. The questionnaire consisted of 3 parts. The first part was to determine the bio-data and socio-economic status of the women, the second to

explore their general knowledge of mother to child transmission (PMTCT) while the last part was knowledge of counselling. The study was conducted between 22nd August and September 30, 2011 and the sample, consisted of 30 women aged between 18 and 49 years.

Results

It was found out that the majority of the women were married (60%) and 50% were aged between 21-30 years. The majority (87%) have heard about prevention of mother to child transmission (PMTCT) but only 10% knew that the HIV could be transmitted through other ways. About 87% of them knew that HIV could be transmitted through sexual intercourse; also 83% of them knew that the virus could be transmitted from the infected pregnant mother to unborn child. The knowledge on mother to child transmission was high; as only 77% knew that HIV could be transmitted during breastfeeding, 70% knew that HIV could be transmitted during pregnancy while 60% knew that the virus could be transmitted during delivery through the vagina. Knowledge of drugs to prevent transmission was also found to be on the high side.

Conclusion

It can be concluded that a high percentage of women had heard of the PMTCT and there was an in-depth knowledge of the modes of transmission especially mother to child transmission. Willingness to undertake an HIV test was mainly for the protection of the baby. It is therefore recommended that the Ministry of Health and Social Welfare should develop guidelines on PMTCT for pregnant women and create more VCT centres. Generally, there should be more education on HIV/AIDS for the public and also it should form part of the school curriculum.

OPSOMMING

Agtergrond

Vrywillige berading en toetsing met betrekking tot die voorkoming van moeder tot kind oordrag (PMTCT) het 'n vernames rol te speel in Lesotho se reaksie op die Mensimmuungebreksvirus (MIV)-epidemie onder vroue van vrugbare leeftyd. Trouens, 'n hoë vlak van MIV-toetsing onder swanger vroue, wat bepaal wie positief is en wie die gevaar loop om die virus aan hulle babas oor te dra, is die hoeksteen van 'n suksesvolle PMTCT-program. Met 'n suksesvolle PMTCT-program as mikpunt, is dit noodsaaklik om vrywillige berading en toetsing (VCT) met voorgeboortelike en kraamsorg saam te voeg, eerder as om dit deur middel van 'n afsonderlike VCT-eenheid te verskaf. Daar is ook 'n behoefte om te besef dat berading en MIV-toetsing vertroulik en vrywillig behoort te wees, en dat die gehalte van dié dienste 'n hoë impak op die begrip rakende vrywillige berading- en toetsingdienste het.

Doelwit

Dié studie is daarop gemik om die huidige kennis aangaande PMTCT onder swanger vroue, wat berading ontvang, te bepaal met die doel om beradingsdienste en oordrag van MIV in eie gelede tydens swangerskapverblyf by die Mabote-kliniek in Tsepong, Lesotho, te verbeter.

Metode

'n Deeglik-gestrukteerde vraelys is aan dertig (30) vroue, wat die eerste keer vir voorgeboortelike sorg registreer, verskaf. Die vraelys het uit drie dele bestaan. Met die eerste deel is daar geprobeer om die bio-data en sosio-ekonomiese status van die vroue vas te stel, die tweede deel was daarop gemik om hulle algemene ingeligtheid rakende moeder tot kind oordrag te bepaal en die derde deel sou 'n beeld weergee van hulle

kennis oor berading. Die studie is tussen 22 Augustus en 30 September 2011 uitgevoer en die monster waarmee gewerk is, het uit 30 vroue tussen die ouderdom van 18 en 49 jaar bestaan.

Bevindinge

Bovermelde het daarop gedui dat die meerderheid vroue getroud was (60%) en 50% se ouderdom het gewissel tussen 21 en 30 jaar. Die meerderheid (87%) het kennis gedra van die voorkoming van moeder tot kind oordrag (PMTCT), maar net ??% van hulle was daarvan bewus dat MIV deur seksuele omgang oorgedra kan word; ook het 83% van hulle geweet dat die virus van die geïnfecteerde swanger moeder aan die ongebore kind oorgedra kon word. Hulle kennis aangaande moeder tot kind oordrag was omvattend; 77% was daarvan bewus dat MIV met borsvoeding oorgedra kan word, 70% het geweet MIV kan tydens swangerskap oorgedra word en 60% het geweet dat die virus tydens geboorte via die vagina oorgedra kan word. Daar is ook bevind dat kennis oor middels om oordrag te voorkom, aansienlik was.

Ten slotte

Hier kan gemeld word dat 'n hoë persentasie vroue kennis van die PMTCT-program gedra het en daar bestaan by hulle omvattende kennis oor die wyses van oordrag, veral van moeder tot kind. Gewilligheid om aan 'n MIV-toets onderwerp te word, het hoofsaaklik om beskerming van die baba gedraai. Derhalwe word daar aanbeveel dat die Ministerie van Gesondheid en Maatskaplike Welsyn riglyne behoort op te stel met betrekking tot PMTCT vir swanger vroue en ook meer VCT-sentrums in die lewe behoort te roep. Oor die algemeen behoort daar vir die publiek omvattender onderrig ten opsigte van MIV/VIGS te wees en dit hoort ook in die leerplan vir skole.

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ACRONYMS & ABBREVIATIONS

AIDS	Acquired Immunodeficiency Syndrome
ARV	Anti-Retroviral therapy
CDC	Centre for Disease Control and Prevention
CD4+	Cluster of differentiation 4†
DNA	Deoxyribonucleic acid
EGPAF	Elizabeth Glazier Paediatric AIDS Foundation
GDP	Gross Domestic Product
GOL	Government of Lesotho
HIV	Human Immunodeficiency Virus
ICAP	International Centre for AIDS Care and Treatment Programmes
LVAC	Lesotho Vulnerability Assessment Committee
MOHSW	Ministry of Health and Social Welfare
NGO	Non-Governmental Organizations
PMTCT	Prevention of mother-to-child transmission
RNA	Ribonucleic acid
RSA	Republic of South Africa
SACU	Southern African Customs Union
STIs	Sexually Transmitted infections
SSA	Sub Saharan Africa
TBs	Tuberculosis
UNAIDS	Joint United Nations on HIV/AIDSs
UNGASS	United Nations General Assembly Special Session
UNICEF	United Nations International Children's Emergency Fund
USA	United States of America

USD	United State Dollar
VCT	Voluntary counselling and testing
WHO	World Health Organisation

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CHAPTER ONE: INTRODUCTION

The human immunodeficiency virus (HIV) was first identified in 1983 in the United States of America (USA) after some homosexuals were recognized to have the acquired immunodeficiency syndrome (AIDS) in 1981. AIDS is now pandemic and worldwide over 1.8million people have died since the first cases were identified in 1981, making AIDS one of the most destructive epidemics in recorded history (UNAIDS, 2010).

The virus acts by gradually weakening the immune system, which is the defence system of the body. This results in the body being unable to resist other infections and this often continues until the individual succumbs to multiple secondary infections. The HIV can be transmitted through sexual intercourse, body fluids, transfusion of infected blood, or from the mother to the child.

1.1 BACKGROUND

Globally, 33.3 million, more than half (15.9million) are women, 22.5 million of whom live in sub-Saharan Africa (51% of all women living with HIV) (UNAIDS, 2010). Currently, the Centers for Disease Control and Prevention (CDC) estimate that there are 33.3 million around the world living with HIV. This number continues to grow; with approximately 7,000 new infections occurring daily, of these infections, nearly 51% are in women.

All these data indicate that Southern Africa remains the epicentre of global AIDS epidemic. Lesotho has the third highest prevalence in the world-just under one in four people in the country are living with HIV. The country had a population of 2.2 million in 2004. Out of this population 260,000 to 310,000 (One quarter) between the ages 0 and 49 years were living with HIV/AIDS. The adult prevalence of HIV/AIDS between the ages of 15 and 49 years in 2009 was between 22.3 and 25.2% (UNGASS, 2010).

HIV/AIDS is indeed a great challenge to science and humanity. It affects individuals, families, communities and the entire societies. Its effects are not only medical but social and economic as well. Social effects include the disruption of families through death of

one or both parents and creation of orphans, loss of livelihood by those who do not die, and stigmatization with consequent isolation of those living with the virus. Economic effects include a reduction in the gross domestic product (GDP) of countries with high prevalence rates due to significant reduction in the productive part of the population, and the high cost of medical care to symptomatic patients. The AIDS deaths seem to be reversing the years of development at all levels of the society and the gains in child health and survival (UNAIDS, Geneva 2001).

Lesotho is one of the countries worst affected and worsening HIV/AIDS problems in the world. The country has the best HIV/AIDS roll-out in the whole Southern Africa, but most activities in this area are coordinated by Non-Governmental Organizations (NGOs) like Elizabeth Glazier Paediatric AIDS Foundation (EGPAF) and Clinton Foundation.

Interventions like provision of antiretroviral drugs to mother and child, elective caesarean delivery and avoidance of breastfeeding are ways in which reduction in the transmission of the virus from mother to child can be achieved. This is called prevention of mother to child transmission (PMTCT). This is only possible if the HIV status of the mother is known before delivery, and this is possible through voluntary counselling and testing (VCT).

Prevention of HIV transmission from mother to her baby while in the womb or during birth or infant feeding requires a comprehensive package of services that include preventing primary HIV infection in women. Becoming educated about HIV and understanding how it is transmitted is the first, and perhaps the most important way to prevent the spread of HIV. It is essential for people to make informed decisions; such decisions are only possible if the HIV status of the mother is known before delivery, hence the necessity of the process of voluntary counselling and testing (VCT). Voluntary counselling and testing refers to the process by which an individual undergoes counselling, to enable him/her to make informed decision.

The PMTCT programme is part of the Lesotho government's initiative to accelerate universal access to HIV prevention, treatment, care and support in 2010. It aims to increase the number of HIV-positive pregnant women who receive a complete course of ARV to reduce the risk of mother-to-child transmission by 80%.

The World Health Organization (WHO) has stated that VCT should be available in all antenatal clinics, but that women should not be coerced into accepting HIV testing. Their right to refuse testing should be respected (UNAIDS, 2001).

Counselling in antenatal settings has special considerations. Women are counselled on all available PMTCT options, family planning and motivation to initiate or maintain safer sexual behaviours. Through this means, sexual contacts of those who test positive to the virus can be encouraged to go for testing. It is therefore very important to reduce mother to child transmission of the HIV so that a lot of illnesses and deaths can be reverted. Infants and maternal mortality rates which have been increasing since the epidemic began can be reduced, and the number of orphans can be reduced. The financial burden both on the health system and on the families affected can also be reduced.

1.2 RESEARCH PROBLEM

Every year in Lesotho, an average of 7,000 babies become infected with HIV (UNAIDS, 2004). The number of facilities providing PMTCT has risen from nine in 2004 to 166 by the end of 2008 (Government of Lesotho, 2006). The number of women who received PMTCT and subsequent antiretroviral (ARV) treatment increased from 421 in 2004 to about 5,000 by end of year 2008, according to 2009 National AIDS Council statistics. Despite the increased number of women on antiretroviral, some of the local health services where women access antenatal services still do not offer PMTCT services. Mother-to-Child transmission is the leading cause of HIV infection in children. Without preventive interventions, approximately 30 to 45% of infants born to HIV-positive mothers will contract the virus during pregnancy, childbirth or from breastfeeding.

There are currently 160,000 women living with HIV in Lesotho (Government of Lesotho, 2010; UNGASS, 2010). Women lack political, financial and social rights, and in most cases are unable to resist demands for sex or even negotiate for practices that would protect their health. The issues are the knowledge the pregnant women have after voluntary counselling and testing has not been established, the problem of having inexperienced counselling team and irregular attendance of the pregnant women to the program. The researcher wants to find out the extent to which the pregnant women understand PMTCT after VCT.

1.3 SIGNIFICANCE OF RESEARCH STUDY

The aim of this study is to establish knowledge of PMTCT among pregnant women attending antenatal care services in Mabote Clinic, Tsepong in 2011 after VCT, in order to provide the Ministry of Health and Social Welfare (MOHSW) with necessary guidelines that will help the Ministry to design appropriate counselling services and allocate resources efficiently.

1.4 RESEARCH QUESTION

What PMTCT knowledge do the pregnant women have after voluntary counselling and testing?

1.5 AIM AND OBJECTIVES OF RESEARCH STUDY

1.5.1 Aim

The aim of this study is to establish the current knowledge of PMTCT among pregnant women who attend counselling in order to improve counselling services and transmission of HIV among them during pregnancy.

1.5.2 Objectives

- To establish what knowledge of PMTCT pregnant women have after attending counselling
- To determine the knowledge contents they received during counselling.

- To compare the current knowledge and the knowledge contents they received during counselling.
- To give guidelines for improving their understanding of PMTCT among pregnant women.

CHAPTER TWO: LITERATURE REVIEW

2.1 HISTORICAL BACKGROUND

In 2007, there were 2.8 million new infections and 2.1 million HIV-related deaths. Sub-Saharan Africa (SSA) remains the region most heavily affected by HIV, accounting for 68% of all people living with HIV and for 76% of AIDS death in 2007 (UNAIDS, 2008). Women in the world and Africa, in particular are experiencing a unique challenge as manifested by the high prevalence of HIV among them. One in five pregnant women in some African countries is infected with the virus. In Sub-Saharan African, on the average, three women are HIV infected for every two men. Almost one in three people infected with HIV viewed in a global content globally lives in Southern African (UNAIDS, 2004).

HIV

HIV belongs to the genus *lente* virus, which attacks the immune system. *Lente* viruses are part of a larger family known as retroviruses, which are slow acting viruses. This means that they take a long time to produce any adverse effects. HIV is a retrovirus that uses its ribonucleic acid (RNA) and the host deoxyribonucleic acid (DNA) to make viral DNA. HIV causes severe damages to the immune system, and eventually destroys it by utilizing the DNA of the cluster of differentiation 4⁺ (CD4⁺) lymphocyte to replicate itself, and destroying the CD4⁺ lymphocyte (Family health International HIV/AIDS Care and treatment). By killing or damaging the cells of the immune system, HIV progressively destroys the ability of the body to fight infection.

There are 2 types of HIV. HIV1 and HIV2 and both are transmitted in the same way. HIV 1 is responsible for the pandemic and is more common in the Western world and East, Central, South and West Africa, and it was discovered in 1983 (UNICEF document, 1999). HIV 2 is less pathogenic, less transmissible and largely restricted to Western Africa, Angola and Mozambique and was discovered in Senegal in 1985.

AIDS

AIDS is the end of spectrum of diseases caused by the HIV and it is defined as the presence of 1 or more AIDS defining illnesses with or without evidence of the HIV infection.

There is no known cure for AIDS as of now. There are only drugs that people can use to slow down the replication of the virus. Children and infants with the infection have swift progression, and around 4 out of 5 die before their fifth birthday (Longmore, M., Wilkinson, I., Torok, E., 2005).

2.2 WHO CLINICAL STAGING OF AIDS (WHO)

There are 4 stages.

STAGE I: Asymptomatic or persistent generalized lymphadenopathy.

STAGE II: (Mild) - Weight loss (less than 10% of the body weight), recurrent respiratory tracts infections, Herpes zoster, and mucocutaneous manifestations.

STAGE III: (Moderate) - Weight loss (greater than 10% of the body weight), unexplained chronic diarrhea or persistent fever both more than 1 year, oral candidiasis, oral hairy leukoplakia, and pulmonary tuberculosis within the last 2 years, severe bacterial infections and unexplained anaemia.

STAGE IV: (Severe)- HIV wasting syndrome, pneumocystis jiroveci (formerly carinii) pneumonia, recurrent severe bacterial pneumonia, chronic herpes simplex infection (oral or genital or anorectal site) oesophageal candidiasis, extra pulmonary tuberculosis, Kaposi sarcoma, Cryptococcus, cryptosporidia, cytomegalovirus, lymphoma, invasive cervical carcinoma and visceral leishmaniasis.

2.3 EPIDEMIOLOGY OF HIV/AIDS

2.3.1 Global

The global AIDS epidemic is one of the greatest challenges facing our generation. AIDS is a new type of global emergency. No region of the world has been spared (UNAIDS/WHO, 2004). New global estimates show that about 33.3 million people worldwide are living with HIV/AIDS in 2009 (UNAIDS/WHO, 2010).

HIV mainly affects people in the productive age group, that is, the 15 – 49 years old. It is spread mainly by heterosexual contact, but homosexual contact is becoming more prevalent. No age group is immune, as new born as well as elderly people are also affected. In 2005, million adults older than 50 years were living with the virus. Adults and children in this period was 1.8 million, with 2.6 million adults and children newly infected. Both men and women are affected and no race is spared (UNAIDS/WHO, 2006).

2.3.2 Africa

The AIDS crisis continues to deepen in Africa (UNAIDS/WHO, 2010). It bears the brunt of the epidemic, carrying about 68% of the total world figures (UNIADS/WHO 2010). Sub-Saharan Africa (SSA) remains world's affected area with about 2.6 million new infections and 1.8 million deaths in 2009. Also, 22.5 million were living with HIV/AIDS. One in five women pregnant women in some African countries are infected with the virus. In SSA, on the average, three women are HIV infected for every two men. Almost one in three people infected with HIV globally lives in Southern Africa (UNAIDS/WHO, 2006).

Southern and Eastern Africa have been far more severely affected than West Africa, but infection rates in a number of Southern Africa countries are quite alarming. In seven Southern African countries, 20% or more of the adult population is infected with HIV (UNAIDS/WHO, 2006).

2.3.3 Lesotho

The Kingdom of Lesotho, located in the eastern part of Southern Africa, is a land-locked country completely surrounded by the Republic of South Africa (RSA). It has been an independent, democratic nation since 1961. Lesotho is governed by a constitutional monarch. The Kingdom covers an area of 30,350 km² and has a population of 1,876,633 million (Government of Lesotho, 2009). 51% of the population is female; 23% of the population lives in urban areas clustered along the northern borders with RSA. 77% of the population lives in rural and remote mountainous areas. The population growth rate declined between 1996 and 2006, from 1.5% to 0.08. Lesotho currently has the lowest growth rate in the southern African region. The impact of the HIV epidemic is a major factor in the decline in population growth. The life expectancy for Basotho is 44.9 years. 58% of the population is under the age of 19. The country is at 154 of the 182 countries listed in the Human Development Index (Swaziland is 142; Botswana 125; Namibia 128; and RSA 129) (UNDP, 2009). 43.2% of the population lives on less than USD1.25 per day; 68 % lives on less than USD2 per day. Lesotho continues to experience high rates of maternal mortality and early infant death although the Government of Lesotho (GOL) has recently launched an intensive effort to address this.

Lesotho is very sensitive to shocks in both the natural and the economic environment. Other than imports from RSA, the main food source for the rural population is subsistence farming and cattle and sheep herding. Changing climate patterns have caused severe drought in the southern regions of the country. Lesotho is the only country in southern Africa to harvest less in 2009 than in 2008 (See <http://www.wfp.org/countries/Lesotho>).

The Lesotho Vulnerability Assessment Committee (LVAC) estimates that between 400,000 and 450,000 people will require some form of humanitarian assistance before the next harvest in April 2010 (Lesotho, 2009). 20% of all children are considered

underweight for age and 13.8% of the population is under nourished (Lesotho National Nutrition Survey, 2007). The main sources of revenue for Lesotho are remittances (largely from South Africa), customs duties (Southern African Customs Union (SACU)) and royalties from the export of natural resources (water and diamonds). The RSA mining sector, the Government of Lesotho, and the textile manufacturing sector are the three main sources of employment.¹⁹ Retrenchments from the mining sector are ongoing. Revenue projections from SACU for 2009/10 have been over estimated by as much as 50% causing the GOL to require severe fiscal restraint measures within the 2010 national budget. The global credit crisis at the end of 2008 resulted in reduced orders for textile products. One factory group required government assistance to avoid bankruptcy in 2009. Another has ceased operations leaving 2,600 individuals out of work.

The first AIDS case in Lesotho was reported in 1986. Since then, the government of Lesotho has struggled to take concrete action against the epidemic due to poor finances and infrastructure. Lesotho has the third highest prevalence rate in the world with one in four people in the country living with the epidemic. In 2009, the new HIV infection was around 23,000 and approximately 14,000 people died from AIDS (UNAIDS, 2010). Over half of the 260,000 adults living with HIV in Lesotho are women (UNGASS, 2010). The National AIDS Prevention and Control Programme was initiated in 1987 and sentinel surveys were introduced by 1992 so as to monitor the spread of HIV every two years (Government of Lesotho, 2006). The country's effort on the epidemic is now guided by the National AIDS Policy and Strategic Plan 2006-2011 (Government of Lesotho, 2006). With this policy, the government planned to reduce the epidemic by focusing on HIV prevention via condom promotion, prevention of mother-to-child transmission and providing antiretroviral treatment for all those in need (Government of Lesotho, 2010).

According to Government of Lesotho's National Guidelines of 2004, Mother to child transmission is the most common mode of human immunodeficiency virus (HIV) transmission in children which can be vertically transmitted from HIV positive pregnant woman to her unborn baby during pregnancy, labour and delivery or through breastfeeding. When the HIV test was developed in the mid-1980s, testing tended to be followed by little HIV counselling. However, with the growing awareness of HIV infection and AIDS and the recent availability of antiretroviral therapy (ART), the scope of and reasons for Voluntary Counselling and HIV Testing have broadened. The interventions to prevent transmission of HIV from mother to child have become increasingly available in Africa but many women do not participate due to fear of discrimination and stigmatization. Their refusal to be tested for HIV and non-receipt of HIV test results have been studied as barriers to participation, but no studies have examined why fewer than one third of pregnant women who received HIV-1 positive test results eventually start taking the antiretroviral prophylaxis (Ministry of Health Ghana, 2003).

Lesotho's PMTCT programme was launched in 2003. Since then, there has been a continuous effort to scale-up and strengthen the programme to reach as close as possible to 100% of HIV positive pregnant women and to ensure that services are available in the villages and communities where these women reside. Between 2007 and 2009, significant progress was made in making PMTCT services available at the health centre level. A national scale-up plan was approved in 2007 and implemented over the 2008 and 2009 period. PMTCT coverage rates have increased from 6% in 2005 to 71% in 2009 (Lesotho UNGASS Country Report, 2008-2009). In recent years, Lesotho has dramatically increased PMTCT services. In 2005, only 12% of pregnant women were receiving antiretroviral drugs to prevent mother-to-child transmission (WHO/UNAIDS/UNICEF, 2007). In 2007, the figure has increased to 32% (WHO/UNAIDS/UNICEF, 2008) and at the end of 2008; an estimated 57% of pregnant women were receiving the drugs.

2.4 WOMEN AND HIV

The impact of the HIV on women is severe, especially in areas of the world where heterosexual sex is the dominant mode of HIV transmission. In SSA, women are 30% more likely to be HIV positive than men. The difference in infection levels between women and men is even more pronounced among young people (UNAIDS/WHO, 2006). Three quarters of all women (15 years and older) living with the HIV are in SSA, and they comprise an estimated 15.9 million (UNAIDS/WHO, 2010). The majority of the women are in the child-bearing age (14-49 years), and this emphasises the need for intervention to PMTCT.

Research indicates that women are two to four times more vulnerable to HIV infection than men during unprotected intercourse which contains much higher quantity of the HIV virus than secretions of a woman (Mate, P.N, Chilibwa S.K., 2004). Likewise, women are more vulnerable to other sexually transmitted infections (STIs), the presence of which greatly enhances the risk of HIV infection. STIs that bring on recognizable symptoms in men are often asymptomatic in women and therefore, they remain untreated, making women more vulnerable to HIV infection (Fleischman, J., 2004). Younger women are more at risk because of the immature cervix and scanty secretions.

It is important to note that in SSA especially in Nigeria, there is still early marriage. Also anal intercourse tears the delicate anal tissues and provides easy access to the virus; this is common in SSA due to the need to preserve virginity. Women are also especially vulnerable to AIDS because they may have limited ability to protect themselves from HIV infection. The alarming rate among women and girls' results in part from widespread human rights abuses, including rape within and outside marriage, sexual violence and coercion, cross-generational sex, economic dependency, and discriminatory access to education, health care, and property and inheritance rights (Mate, P.N, Chilibwa S.K., 2004; Fleischman, J., 2004).

Young women widowed by AIDS may lose their land and property after their husbands die, whether or not inheritance laws are there to protect them. For example, in a Ugandan survey, one in four widows reported that their property was seized after their partners died. A woman may also be prevented from using her property or inheritance for her family's benefits, which in turn hurts her ability to qualify for loans or agricultural grants. The denial of these basic human rights increases women and girls' vulnerability to sexual exploitation, abuse and HIV (UNICEF, 2003).

A woman may be at risk of HIV infection even though she is faithful to her husband, because her husband may have other sexual partners, including non-spousal partners and co-wives. She may have little or no control over her husband's actions and no ability to protect herself by having her husband use condoms when having sex with her or other women (National AIDS & STD Control Program, 2002).

In Cambodia, some studies reported that 13% of the urban and 10% of rural men had sex with both a sex worker and their wife or steady girlfriends. Meanwhile, the country's 2000 Demographic and Health Survey found that only 1% of married women use condoms during the last sexual intercourse with their husbands (Cambodian National Institute of Statistics/Ore International, 2000). The risk of this behaviour to wives and girlfriends is clear. In Thailand, a 1999 study found 75% of HIV-infected women were likely infected by their husbands. Nearly half of these women reported heterosexual sex with their husbands as their only HIV-risk factor (Yuanyuan, X. et al, 2000). In some settings, it appears that marriage actually increases women's HIV risk.

In some African countries, adolescents, married female 15-19 years old have higher HIV infection levels than non-married sexually active female of the same age (Glynn, J.R., Carael, M., Auvert, B., 2001).

2.5 CHILDREN AND HIV

HIV infection among children is an increasing serious public health problem, threatening to increase the reducing child mortality. Many of these children acquire HIV through mother to child transmission, starkly illustrating current global health inequities.

In 2009, 2.5 million children under the age of 15 years globally were living with the virus, with 2.3 million of them living in SSA. There are over 15 million orphans living in SSA with over 90% of them born to HIV positive mothers (UNAIDS/WHO, 2010).

An orphan is defined as a child under the age of 18 years, who has had at least one parent dead. A child whose mother has died is known as a maternal orphan; a child whose father has died is a paternal orphan. A child who has lost both parents is a double orphan. Many agencies now avoid using the term 'AIDS orphans' as it is stigmatizing. Extensive research shows that stigma prevents government and its communities from effectively responding to the orphan problem, as well as hindering the emotional recovery of affected children themselves (Stein, J. et al, 2003).

The United States Bureau of Census has predicted that the disease will wipe out the improvement in infant and child mortality achieved in the last ten years in SSA (World AIDS Campaign). AIDS kills much faster in developing countries than in industrialized countries of the West. In Europe, 80% of infected children survive at least until their third birthday and more than 20% reach the age of ten (World AIDS Campaign).

In Zambia, however, one study suggests that nearly half of HIV infected children were dead by the age of two. In another study in Uganda, 60% of HIV infected children were dead by the age of three (Colebunders, R.L., Kapita, B., Nekwi, W. et al, 1998).

Family Health International found that an estimated one in five children in AIDS-related families reported that they were forced to start work in the previous six months to support the family. One in three had to provide care and take on major household work. Many had to leave school, forego necessities such as food and clothes, or were sent away from their homes. Furthermore, all the children were exposed to high levels of stigma and psychological stress. Girls were found to be more vulnerable than boys (Family Health International, 2002).

HIV infection in the new-born is difficult to detect. This is because the new-born will carry its mothers' antibodies until the age of 18 months without actually being infected themselves, and most simple tests cannot tell the difference (Jovaisas, E., Koch, M.A.,

Schafer, A., 1985). Also, since infants infected suffer chronic diarrhoea, fever, respiratory infections, and loss of appetite which are all common diseases of childhood, a high index of suspicion is needed.

In Nigeria, by the end of 2005, about 240,000 children under 15 years of age were infected, with there being about 1 million orphans (UNAIDS/WHO, 2006).

In Lesotho, by the end of 2009, about 28,000 children under the age of 15 years were living with the HIV, with about 130,000 orphans due to AIDS (UNAIDS/ WHO, 2010).

2.6 KNOWLEDGE OF PREGNANT WOMEN ON HIV

Knowledge on HIV/AIDS among pregnant women in our environment has been found to be quite variable.

A study done in Buta Buthe, Lesotho, to assess the knowledge of pregnant women on HIV/AIDS found that although most of the women knew about HIV, and that it could be transmitted sexually, knowledge on PMTCT was poor. Only 25% knew that HIV could be transmitted through breast milk.

2.7 VOLUNTARY COUNSELLING AND TESTING (VCT)

Voluntary Counselling and testing (VCT) is the process by which an individual undergoes confidential counselling to enable the individual to arrive at an informed choice in respect of learning his or her HIV status and taking appropriate action. Counselling for VCT consists of pre-test, post-test and follow up counselling. During pre-test counselling, the counsellor gives an individual (or a couple or group) the opportunity to explore and analyze their situation and consider being tested for the virus. Each individual makes an informed decision regarding whether or not to undergo the HIV test after he or she has been provided all relevant information to enable him/her understand the nature of what is involved (Yuanyuan, X et al , 2000).

As far back as 1995, the Public Health Service in USA recommended universal voluntary HIV counselling and testing of all pregnant women and treatment of all those affected. This was implemented and a sustained decline in perinatal HIV transmission with

Zidovudine treatment was noticed (Centre for Disease Control and Prevention, 1996-1998). This resulted in 83% decline in perinatal AIDS cases diagnosed in 1999 in America.

The Joint United Nations on HIV/AIDS, recognising the important role that VCT plays in the comprehensive ranges of measures for HIV/AIDS prevention encouraged national policies relating to VCT along specific guidelines (UNAIDS, 2000).

There are a number of benefits offered by undergoing VCT in pregnant women. It can lead to prevention of HIV transmission from a positive tested mother to a negative or untested partner.

Studies done in the USA and Africa have shown a significant reduction in HIV transmission to sero-negative partner after VCT. This is significant because about 25% of people with HIV have sero-discordant partners (Goedert, J., Estyer, M., Biggar, R., 1987). Also transmission from a positive tested mother to a child is decreased by at least 50% of cases (Centre for Disease Control and Prevention, 1996-1998). There is also increased adherence to antiretroviral therapy, preventive therapy, and antiretroviral regimens for PMTCT, and infant feeding options. A woman (and her family) who knows she is HIV infected can be encouraged to enter into the continuum of care in order to seek early medical treatment and care of opportunistic infection for herself and her child.

The client-centered nature of counselling encourages trust between the counsellor and the client so that there is an opportunity for in-depth discussion of HIV/AIDS, including how to prevent it (Glynn J.R. & Co, 2001). Counselling helps people to identify the implications of a negative or positive result, and assists them in considering various practical strategies for coping with test result. Post-test counselling supports people in understanding their test result and its implications, whether the result is positive or negative. Counselling also helps clients explore whom they might share the test result

with, and how to approach such a personal matter and process with other members of the families.

Follow-up counselling supports clients in coping with issues raised as a result of learning of their HIV status, and is relevant for both clients that is, either positive or negative result. For many years, little was known about preventing transmission of HIV infection from mother to child. Recently, however, many advances have been made in developing effective and affordable interventions that reduce the likelihood that a woman will pass.

HIV counselling and testing in relation to pregnancy and other reproductive health services may prove a valuable entry point for the provision of counselling and testing to the wider community of healthy and asymptomatic women and their partners. Some reproductive health settings such as STI (Sexually Transmitted Infections) clinics, paediatric services and family planning clinics may also provide an opportunity to offer testing to potential mothers and fathers while antenatal services will allow testing to be offered to women already pregnant and their partners.

Counselling and voluntary testing for HIV contains benefits beyond the prevention of transmission from mother to child. Counselling services have been slow to gain acceptance in many countries, especially where HIV is heavily stigmatized and access to services and support for the HIV-infected remains limited. Indeed, HIV testing has often been used as a diagnostic tool to confirm symptomatic AIDS. However a growing number of studies attest to the value of counselling and voluntary HIV testing in largely healthy populations.

The service has shown to contribute to an increase in safe sexual behaviour at the individual level and is likely reduce the ignorance, fear and stigma associated with HIV infection in the population at large especially in Lesotho (Government of Lesotho, 2006). Few countries have actively promoted counselling services and few are yet to develop clear national guidelines on the provision of counselling and voluntary HIV testing in reproductive health service settings. This acceptance depends on the women

perceiving that VCT and other feeding strategies would provide clear benefits, primarily for the child.

VCT in the antenatal setting is the cornerstone in the prevention of mother to child transmission of HIV. The advances made in Prevention of Mother to Child Transmission using simple, less expensive therapy contain the potential to reduce the number of children infected with HIV in the developing world (UNAIDS Lesotho, 2007).

There exists a number of ways in which this prevention can be brought about. The antenatal clinic is one of the few places where health service providers can have routine interactions with young pregnant women. This provides an important opportunity for women to receive health promotion information. Counselling and testing without access to appropriate therapies for the HIV infected woman is seen as a death sentence and results in acceptance rates in developing countries being low.

According to De Cook et al (2000), policies and practises on HIV Counselling and testing need to be reviewed to ensure that pre-test counselling requirements are not barrier to diagnosing HIV infection in women and preventing transmission to their children. According to him and his team, in the United States, it has been recommended that offering women the opportunity to decline HIV testing ("informed right to refusal")while incorporating routine HIV counselling and testing into Standard antenatal care reconciles the need for informed consent with that of expanding HIV testing and treatment access (Institute of Medicine, 1999). Similarly in developing countries, prenatal counselling and testing must be simplified as much as possible and offered routinely while remaining voluntary, confidential and supportive of HIV/AIDS prevention in women and their partners.

2.8 COUNSELLING IN THE CONTEXT OF PMTCT

For pregnant women to make informed decisions about reducing their risks of transmitting HIV to their babies, they must know their HIV status. Therefore counselling and HIV testing is the entry point into PMTCT programme. Making counselling and

testing services available in health centres and clinics is a key PMTCT programme objective. United Nations guidelines (UNAIDS, 1999) recommends that all pregnant women receive voluntary counselling and testing for HIV.

In the context of PMTCT, counselling occurs in two phases:

- Counselling and informed consent for HIV testing
- Ongoing counselling and information during the antenatal and postnatal periods to support baby feeding and other decisions such as disclosing HIV status.

Counselling and testing for HIV has traditionally taken place in the context of existing illness as clients are typically referred from services treating STIs, TB or other infectious diseases. In the maternal and child health setting, counselling and testing has the potential to reach large numbers of women who may not already be infected thereby providing an opportunity for prevention through counselling to reduce high-risk behaviour.

In pregnancy, providing information about HIV testing is not optional. Without information, there can be no informed choice. It is very important to provide information and to assist women to make a decision as to whether to be tested for HIV. Provision of information and counselling to pregnant women about HIV testing should be part of the current standard of care, such as information and counselling around family planning.

Lesotho's PMTCT programme was launched by the Ministry of Health and Social Welfare (MOHSW) in 2003. Since then, there has been a continuous effort led by the MOHSW to scale-up and strengthen the programme to reach as close as possible to 100% of HIV-positive pregnant women and to ensure that services are available in the villages and communities where these women reside. Between 2008 and 2009, significant progress was made in making PMTCT services available at the health centre level. A national scale up plan was approved in 2007 and implementation is continuing (Government of Lesotho, 2007). It included training and retraining of health care providers in both the

public and private sectors. It also included revising and updating the national PMTCT guidelines to incorporate changes in best-practice, in particular those in relation to the care and support of HIV-exposed infants. The new guidelines also support the PMTCT+ approach which encourages greater male involvement in all stages of the reproductive cycle and the use of PMTCT as an entry point to address HIV within the context of the whole family. Different partners are assisting the MOHSW in the PMTCT programme, including ICAP, EGPAF, BIPAI, CHAI, Mothers-2-Mothers and the Global Fund.

Table 1: Progress on PMTCT (Government of Lesotho, 2009)

	2004	2005	2006	2007	2008	2009
No. Of facilities providing PMTCT	9	22	37	136	180	186
No. Of clients pre-test counselled	2 764	10 684	13 047	26 293	28 033	29 300
No of clients tested	2 764 (41.2%)	5 459 (51%)	9 277 (71%)	23 965 (91%)	26 203 (93%)	27 389 (93%)
No of clients post-test counselled	2 377 (86%)	4 913 (89%)	7 168 (77.2%)	23 196 (96.8%)	25 050 (96%)	25 322 (92%)

2.9 THE BENEFITS OF INFORMATION, COUNSELLING AND VOLUNTARY HIV TESTING FOR DIFFERENT CLIENTS IN REPRODUCTIVE HEALTH SETTING (UNAIDS, 2001).

2.9.1 Pregnant women who test HIV-negative

Counselling a woman following a negative test can help her;

- Understand and maintain safe behaviour to avoid future infection
- Breastfeed for the greatest health of the baby

2.9.2 Pregnant women who test HIV-positive

Counselling a woman following a positive test can help her;

- Decide whether to share her HIV status with anyone and, if so, with whom
- Choose to terminate her pregnancy where safe, legal and available
- Choose to benefit from antiretroviral therapy where available
- Understand infant feeding options and choose that which is best in her circumstances
- Learn more about HIV infection and its implications for her health
- Access support groups and health services that promote positive living
- Make choices about sexual behaviour and future fertility

2.9.3 Partners of pregnant women

Counselling and voluntary testing of partners of pregnant women helps couples;

- Support one another in decisions about care and infant feeding
- Make decisions about future fertility
- Choose behaviours that reduce the risk of contracting or spreading the virus.

2.9.4 The wider community

Widespread availability and use of counselling and voluntary testing for HIV in a community can;

- Reduce fear, ignorance and stigma surrounding HIV
- Stimulate a community response in support of those needing care

- Contribute to an environment supportive of safer sexual behaviour
- Reduce spill-over of artificial feeding to HIV-negative mothers

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 MATERIALS AND METHOD

This study was done at Mabote Clinic, Tsepong in Naledi, Lesotho. The hospital was established in 2009 but it used to be one of the filter clinics managed by the Ministry of Health and Social Welfare; now Netcare has taken over the management of the clinic. One of the reasons for the establishment of Mabote Clinic was to provide expert obstetric and gynaecological care. The hospital runs one of the largest antenatal clinics in Maseru.

3.2 STUDY DESIGN

This descriptive cross sectional study was carried out between August and October 2011.

3.3 STUDY POPULATION

The Study population consisted of the pregnant women registering for the first time for antenatal care in Mabote Clinic, Tsepong.

3.4 SAMPLE SIZE

The minimum sample size was calculated using the formula

$$n = \frac{z^2 p (1-p)}{e^2}$$

Where:-

Z = value of standard deviation = 1.96 at 95% confidence level.

p = prevalence value of knowledge = 80%
(UNGASS: <http://wwtolerable.w.unaids.org/UNGASS/index.html>).

e = tolerable sampling error = 20%

n = sample size

$$n = \frac{(1.96)^2 \times 0.8 (0.2)}{(0.2)^2} = \frac{3.8416 \times 0.16}{0.04}$$

$$n = 15.3664$$

However, a sample size of 30 was used in order to increase the accuracy.

3.5 SAMPLING PROCEDURE AND SAMPLING DURATION

The sampling procedure used was serial recruitment of eligible participants who were registering for antenatal clinic during the study period until the desired sample size was achieved.

3.6 SAMPLING INCLUSION CRITERIA

All pregnant women presenting for antenatal clinic registration for the first time in the pregnancy during the survey period were included.

3.7 DATA COLLECTION TECHNIQUE

The study material was a questionnaire consisting of 3 parts. The first part was to determine the bio-data and socio-economic status of the participants like age, marital status, religion, etc. The second was to explore their general knowledge of mother to child transmission (PMTCT) while the last part was knowledge of counselling.

The questionnaires were given to the pregnant women by the matron in the antenatal clinic. They were written in both English and Sesotho. Qualitative data was collected over a period of two month. 30 questionnaires were given out and all were retrieved for collation and analysis.

3.8 DATA ANALYSIS

Compilation and analysis was carried out using the computer. The mean age and standard deviation was calculated using the formulas [Christensen, L.B., Johnson, R.B., Turner, L.A. (2011)].

$$\bar{x} = \frac{\sum fx}{n}$$

$$SD = \frac{\sum \sqrt{(fx - \bar{x})^2}}{n-1}$$

Where

\bar{x} = Sample mean

f = frequency of the observations

x = value of the observation

SD = Standard deviation

Σ = the sum of

n = sample size

$\sqrt{\quad}$ = square root

3.9 LIMITATIONS OF THE STUDY

1. One of the main constraints is time and this made it difficult to use a much larger sample size, which would have provided more precise statistics
2. Finance also contributed to it. Due to the funds involved, larger sample size could not be used.
3. Few questions were left unanswered by the respondents and this could contribute to not getting a full picture of this study.

CHAPTER FOUR: RESULTS AND FINDINGS

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

4.1 INTRODUCTION

The questionnaire was distributed between 22nd August and September 30, 2011. All participants selected the criteria which were:

- Women aged 18-49 years
- Speak one of local language (Basotho or English).
- Attend antenatal care clinics at Mabote Clinic, Tsepong, Lesotho.

Result interpretation:

The results are presented in three major sections: Socio-demographic profile of participants; Knowledge about prevention of mother to child transmission (PMTCT) among pregnant women that attend antenatal and counselling.

4.2 SOCIO-DEMOGRAPHIC PROFILE OF RESEARCH PARTICIPANTS

All the thirty (30) participants were pregnant women attending Mabote Clinic, Tsepong, Lesotho. The number of participants who participated in the questionnaire was as follows;

Table 2: Age distribution of study participants (N=30) Age (years)

Age distribution of study participants	N	(%)
18-20	6	(20%)
21-30	15	(50%)
31-40	8	(27%)
41-49+	1	(3%)

Just half (50%) of the study participants were between 21-30 years while only one (3%) participant was over 40 years of age.

Table 3: Marital Status of the Participants (N=30)

MARITAL STATUS	Frequency	%
Married	18	60
Single	6	20
Divorced	3	10
Separated	3	10
Widowed	0	0
Total		

Table 4: Religion of the Participants (N=30)

RELIGION	Frequency	%
Christian	26	87
Muslim	3	10
Traditional	1	3
Others	0	0

This can be seen that the vast majority of the participants were married and mostly Christians (Catholic, Anglicans and Zion).

Table 5: Distance travel to the clinic by participants (N=30)

DISTANCE TRAVEL	Frequency	%
Travel less than 5 km	10	33
Travel between 5-10km	14	47
Travel more than 10km	6	20

Table 6: Cost of travel to clinics incurred by the Participants (N=30)

COST OF TRAVEL	Frequency	%
Pay less than 4Rand	4	13
Pay more than 4 Rand	17	57
No payment	9	30

Almost half of the participants 14 (47%) traveled between 5km – 10km from home to the clinic, whilst 6 (20%) said they travel more than 10km and the rest 33% travel less than 5km to the clinic. The main contributing factor given by people travelling between 5-10km and very few less than 5km was that some of the clinics were undergoing renovation. Some of the services were temporarily suspended in the area of ANC.

More than half of the respondents incur more than 4rand as the transport costs, while only 4 that is 13% said they paid less than 4 Rand for the trip and 9 participants (30%) said that they do not pay any fare because their houses are not far from the clinic.

Knowledge regarding PMTCT among pregnant women that attend antenatal

Table 7: Knowledge about PMTCT services from any source, other than the Clinic

Heard of PMTCT	Frequency	%
Yes	26	87
No	4	3
Total	30	100

The majority of respondents 26 (87%) have heard of PMTCT.

Table 8: Source of Information on PMTCT Service

Source of Information	Frequency	%
(a) Family Member	11	37
(b) Radio	22	73
(c) Friend	13	43
(d) TV	20	67
(e) Pamphlet/poster	16	53
(f) Hospital worker	18	60
(g) Newspaper/magazine	13	43
(h) Others	2	7

Some of the respondents have heard of PMTCT from more than one source, but the majority of them 22 (73%) heard from Radio, while TV 20 (67%) and Hospital worker was the next common source.

Table 9: Methods of HIV transmission identified by participants (N=30)

Method HIV transmission	Frequency	%
(a) Sexual intercourse	26	87
(b) Blood transfusion	20	67
(c) From infected pregnant mother to unborn child	25	83
(d) Contaminated needles	19	63
(e) Other ways	3	10

The above table 8 shows that the participants had a good understanding of how a person can contract HIV. Out of thirty participants, 26 (87%) identified the risk of contracting HIV by having sexual intercourse while the next one 25 (83%) was with the infected pregnant mother to the unborn child. The participants 20 (67%) recognized that blood transfusion as one of the methods of the HIV transmission. Three (10%) of the participants did not specify any other ways of HIV transmission.

Table 10: Knowledge on the way of HIV prevention

Way of prevention	N	(%)
(a) Abstinence	18	60
(b) Be faithful	20	67
(c) Condom use	23	77
(d) Don't know	2	7

The majority of participants 23 (77%) identified condom use as a way of protection against HIV infection while 20 (67%) participants regarded being faithful as one of the ways of preventing HIV.

Eighteen (60%) of participants mentioned abstinence another ways of protection against getting HIV.

Table 11: In what way can an infected pregnant woman transmit HIV to her unborn baby?

Knowledge on how woman transmit HIV to her unborn baby?	Frequency	(%)
a)During pregnancy	21	70
b)During Delivery	18	60
c)During Breastfeeding	23	77
d) Don't know	5	17

The above figure Indicates that the majority of participants 23 (77%) were aware that HIV positive woman can transmit the virus to her baby during breastfeeding and 70% during pregnancy, but fewer participants mentioned transmission during delivery (17%).

Table 12: Participants response of the importance of being tested for HIV

Previous HIV Test	Frequency	%
Yes	26	87
No	3	10
Don't know	1	3
Total	30	100

Majority of the respondents 26 (87%) mentioned that it is important for pregnant women to be tested of the epidemic while only 3 (10%) have signified that they do not see the importance of being tested and 1 (3%) participants said that she does not have idea of the importance of the test.

Table 13: Respondents responses of drugs available for the prevention of HIV infection from the mother to child

Participant Response	Frequency	%
Yes	25	83
No	3	10
Don't know	2	7
Total	30	100

From the above table, it can be seen that majority of the participants 25 (83%) mentioned that they are aware of the availability of drugs for the prevention of the HIV infection from mother to child while 3 (10%) participants said they are not aware of that. Two (7%) participants said that they do not have an idea about the availability of the drugs.

According to the responses of the participants, the general attitude of their community towards people living with HIV/AIDS are the following: From being supportive, some are stigmatized and discriminated while few community members run away from them and few are accepted and encouraged to take their drugs (ARVs).

COUNSELLING

Table 14: Subjects discussed with the counsellor during the pre-test counselling session (N=30)

Participant Respond	Frequency	%
a)Prevention of HIV	20	67
b)Taking a HIV test	21	70
c)About the test result	21	70
d)Ongoing counselling	23	77

It is evident that the key subjects on HIV listed above were covered in almost all the pre-test counselling sessions. During ongoing counselling, 23 (77%) of participants understood taking a HIV test while 21 (70%) participants had a good understanding of what the test result is all about and also 21 (70%) have a good understanding about taking the test and were able to ask questions during counselling session, 20 (74%) understood prevention about HIV.

Table 15: Participants Response to the understanding of pre-test counselling

Participant Response	Frequency	%
Yes	27	90
No	3	10
Total	30	100

Majority of the respondents understood pre counseling 27(90%) while only a few did not.

Table 16: Participants Response to the test's confidentiality

Participant Response	Frequency	%
Yes	28	93
No	2	7
Total	30	100

The majority, 28 (93%) said that they received an explanation about test's confidentiality.

Table 17: Participants' Response to past history of HIV testing

Participant Response	Frequency	%
Yes	30	100
No	0	0
Total	30	100

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

Most of the respondents 21 (70%) agreed testing for HIV and some of the reasons given include the following:

The benefits included the importance of and relief associated with knowing one's HIV status, the ability to live a better life or live positively after testing and protecting oneself and partners their by accessing health care and to get ARV treatment during delivery or to prolong the life. They also said it helped them to change risky behaviors and prevent the spread of the HIV.

Table 18: If you had a choice, would you have preferred to be attended to by?

Participant Respond	Frequency	%
(a) Female	17	57
(b) Male	4	13
(c) Somebody younger than you	1	3
(d) Somebody older than you	15	50
(e) Somebody of your age	5	17
(f) Anybody	10	33

Participants were asked if they had a preference for a specific type of counselors. Out of Thirty participants, for each choice, most of the respondents preferred female 17 (57%) while 15 (50%) participants said they would prefer somebody older than themselves. Ten (33%) were happy to be counseled by anyone.

Table 19: How satisfied are you with the privacy and counselling you receive at the clinic?

Participant Response	Frequency	%
(a) Very satisfied	21	70
(b) Satisfied	8	27
(c) Unsatisfied	1	3
(d) Very unsatisfied	0	0
TOTAL	30	100

Most of the participants 21 (70%) were very satisfied compared to (27%) who were just satisfied and few (3%) were unsatisfied.

Table 20: How many hours did you spend at the clinic today?

Participant Response	Frequency	%
a) < 30 min	8	27
b) 30-60 min	13	43
c) 60min -2 hours	4	13
d) 2-4 hours	5	17
TOTAL	30	100

Table 19 shows that the majority of participants spent 30-60 minutes at the clinic, although a small number spend between 60 minutes to 2hours at the clinic

Those who did not take up the test and attend post-test counselling would almost certainly have spent a shorter time at the clinic.

4.3 FINDINGS

In the present management of a pregnant woman especially in Sub-Saharan Africa where 51% of the total HIV infection occurs, it is imperative that the HIV status of the woman is known. It is only then that timely interventions can be undertaken.

WHO has said that VCT is the best way for pregnant women to know their HIV status, but it is important that there should be pre and post counselling as this produces more positive result than one that is not done voluntarily (UNAIDS, 2010).

The majority of the respondents 87% have heard about PMTCT. Only 87% knew it could be transmitted through sexual intercourse, whereas other routes such infected from the mother to the child was also well acknowledged.

The main sources of information were through the radio (73%), television (67%) and from the hospital worker (60%). A few of the women got information from their family member or friend. Previous studies in developing countries have shown that information on sexual and reproductive matters are usually informal, and the main source being the media (WHO, 2009).

CHAPTER FIVE: OVERALL FINDINGS AND RECOMMENDATIONS

5.1 OVERALL FINDINGS

This study was carried out in Mabote Clinic, Tsepong in Lesotho among women aged between 18 and 49 years registering for antenatal clinic for the first time, in this pregnancy, 30 women were used in the study.

The study showed that the commonest source of information on HIV/AIDS was through the radio. A high percentage of women had heard of HIV, also there was an in-depth knowledge of the modes of transmission especially from mother to child transmission. Many were aware of transmission during pregnancy or breastfeeding.

The study showed that PMTCT was well acknowledged by the pregnant women. Also a high percentage of women had the knowledge of the drugs available to prevent the prevention of the epidemic from mother to child which was quite encouraging.

Protection of the baby and knowledge of the mother's status were among the reasons for taking the HIV test.

5.2 RECOMMENDATIONS

As a result of the study, the following recommendations are made.

1. The Ministry of Health and Social Welfare should develop guidelines about PMTCT and VVCTC for pregnant women, and should put in place measures to make sure the guidelines are strictly adhered to.
2. There should be more education on HIV/AIDS and should form part of the school curriculum starting from primary school.
3. Use of mass media for education/enlightenment campaigns for the public.
4. Mandatory screening should be discouraged.
5. There should be more awareness and education for health professionals on the use of anti-retroviral in HIV management and PMTCT.

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APPENDIX A- CONSENT TO PARTICIPATE IN RESEARCH



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CONSENT TO PARTICIPATE IN RESEARCH

THE KNOWLEDGE OF PREVENTION OF MOTHER TO CHILD TRANSMISSION AMONG PREGNANT WOMEN AT MABOTE CLINIC, TSEPONG, LESOTHO AFTER VOLUNTARY COUNSELLING AND TESTING

You are asked to participate in a research study conducted by Folashade Olorunfemi, a student from the Africa Centre for HIV and AIDS and the Management Sciences Faculty at Stellenbosch University. The results of this study will anonymously be processed into the study report on The Knowledge of Prevention of Mother to Child Transmission among Pregnant women after Voluntary Counselling and Testing. You are selected as a possible participant in this study as a result of attending antenatal clinics at Mabote Clinic, Tsepong, Lesotho that has been selected to participate.

1. PURPOSE OF THE STUDY

The purpose of the study is to determine the knowledge of pregnant women that attend antenatal clinic at the hospital about the prevention of Mother to Child Transmission (PMTCT) after Voluntary Counselling and Testing (VCT) in order to provide the Ministry of Health with guidelines that will help to design appropriate counselling services and allocate resources efficiently.

2. PROCEDURES

If you volunteer to participate in this study, we would ask you to do the following activities:

Questionnaire

Complete a questionnaire about your knowledge on prevention of mother to child transmission (PMTCT) after voluntary counselling and testing. This will take 30 minutes of your time at a time this has been identified as convenient.

3. POTENTIAL RISKS AND DISCOMFORTS

There are no potential risks and discomforts. If there is any, reassurances would be given to such participants that the information they would be given are just for assessment and not to attack them or their reputation.

4. POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

It is visualized that the research can assist the pregnant women, families to know more about prevention of mother to child transmission (PMTCT). Also it gives the Ministry of health guidelines that will help to design appropriate counselling services and allocate resources efficiently.

5. PAYMENT FOR PARTICIPATION

There will be no payment for participation. This is a voluntary exercise that is contingent on your participation.

6. CONFIDENTIALITY

Confidentiality will be maintained at all times. As no personal details will be collected from the participants, there is no direct threat to the participants. The hospital in question will be identifiable and as such all documentation concerning the patients' records in the hospital will be kept in a closed location not accessible by the public.

The information might also be inspected by the University of Stellenbosch, Human Research Ethics Committee. The records will only be utilized by them in carrying out their obligations relating to this study.

7. PARTICIPATION AND WITHDRAWAL

You can choose whether to participate in this study. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you don't want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant so doing.

8. IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about the research, please feel free to contact Folashade Olorunfemi on Cell: +266 63102946, email: folashademi@yahoo.co.uk or Prof Jan du Toit (Study Supervisor) on +27 21 808 3004 or jbdt@sun.ac.za

9. RIGHTS OF RESEARCH SUBJECTS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, contact Ms Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] at the Division for Research Development.

SIGNATURE OF RESEARCH SUBJECT OR LEGAL REPRESENTATIVE
--

The information above was described to me by Folashade Olorunfemi in English/Sesotho. A translator.....was asked to explain in my own language sections that I could not understand. I am in command of this language..... and where necessary it was satisfactorily translated to me.

I.....was given the opportunity to ask questions and these questions were answered to my satisfaction. I am aware that the results of the study will anonymously be processed into a study report and that at any stage I can withdraw my consent and participation in the study.

I hereby consent voluntarily to participate in this study. I have been given a copy of this form.

Name of Subject/Participant

Date

SIGNATURE OF INVESTIGATOR

I declare that I explained the information given in this document to _____
_____. [He/she] was encouraged and given ample time to ask me any question.
This questionnaire was conducted in _____ and a/no translator was used in this
questionnaire was translated into _____ by _____.

Signature of Investigator

Date

APPENDIX B – Letter of consent



Mabote Clinic
Private Bag A144 Maseru 100 Lesotho

27TH JUNE, 2011

The Manager,
Academic Programmes,
Stellenbosch University.
Stellenbosch.

South Africa

Dear Sir/Ma,

DECLARATION AND APPROVAL BY THE HIV UNIT TO FULLY ASSIST MRS. OLORUNFEMI ADEBOLA FOLASHADE TO CARRY OUT HER STUDY ON "THE KNOWLEDGE OF PREVENTION OF MOTHER TO CHILD TRANSMISSION AMONG PREGNANT WOMEN AT MABOTE CLINIC MASERU AFTER VOLUNTARY COUNSELLING AND TESTING" WHEN APPROVE BY THE INSTITUTION.

On behalf HIV Unit of Mabote Clinic I hereby assured that I will fully support Mrs. Olorunfemi Adebola Folashade to carry out her study when ever it is approved by the university.

Thanks for your co-operation.

A handwritten signature in black ink, appearing to read "Dr. Hassan M.", is written over a blue circular stamp.

DR. HASSAN. M.
Coordinator of HIV unit Mabote Clinic
Maseru.



APPENDIX C- QUESTIONNAIRE

THE KNOWLEDGE OF PREVENTION OF MOTHER TO CHILD TRANSMISSION AMONG PREGNANT WOMEN AT MABOTE CLINIC, TSEPONG, LESOTHO AFTER VOLUNTARY COUNSELLING AND TESTING.

This question is purely for the purpose of this research. All information given will be treated as highly confidential and does not require names / identities of the informants. Kindly indicate with "X" the most appropriate response (s) to the questions below

Thank You

A) SOCIODEMOGRAPHIC CHARACTERISTICS	Please X correct answer
Date of Interview:	
1) Hospital Number:	
2) Age (as last birthday) in years: Age (years)	
(a) 18-20	
(b) 21-30	
(c) 31 – 40	
(d)41-49+	
3) Marital status:	
(a) Married	
(b) Single	
(c) Divorced	
(d) Separated	
(e) Widowed	
4) Religion:	
(a) Christian	
(b) Muslim	
(c) Traditional	
(d) Others Specify	
If a Christian which denomination Anglican, Catholic or Protestant	
5) How far do you travel to the hospital?	
(a) Travel less than 5 km	
(b) Travel between 5-10km	

(c) Travel more than 10km	
6) How much do you spent on transport to the clinic	
(a) Pay less than 4Rand	
(b) Pay more than 4 Rand	
(c) No payment	
(B) KNOWLEDGE ABOUT PREVENTION OF MOTHER TO CHILD TRANSMISSION (PMTCT) AMONG PREGNANT WOMEN THAT ATTEND ANTENAL	
7) Have you heard about PMTCT services from any source other than the Clinic?	
(a) Yes	
(b) No	
8) If yes, from which source did you hear about this information?	
(a) Family Member	
(b) Radio	
(c) Friend	
(d) TV	
(e) Pamphlet/poster	
(f) Hospital worker	
(g) Newspaper/magazine	
(h) Others	
9) How does a person get infected by HIV?	
(a) Sexual intercourse	
(b) Blood transfusion	
(c) From infected pregnant mother to unborn child	
(d) Contaminated needles	
(e) Other ways	
10) How can one be protected against getting HIV?	
(a) Abstinence	
(b) Be faithful	
(c) Condom use	
(d) Don't know	
11) In what way can an infected pregnant woman transmit HIV to her unborn baby?	
(a) During pregnancy	
(b) During Delivery	

(c) During Breastfeeding	
(d) Don't know	
12) Do you think it is important for pregnant women to do the HIV test?	
(a) Yes	
(b) No	
(c) Don't know	
13) Are you aware that there are drugs to prevent HIV infection from the mother to the child?	
(a) Yes	
(b) No	
(c) Don't know	
14) What is the general attitude of your community towards people living with HIV/AIDS?	

C) COUNSELLING	
15) What did you talk about with the counsellor regarding HIV testing today?	
a)Prevention of HIV	
b)Taking a HIV test	
c>About the test result	
d)Ongoing counselling	
16) Did you understand pre-test counselling?	
(a) Yes	
(b) No	
17) Were you explained about the test's confidentiality?	
(a) Yes	
(b) No	
18) Were you tested of HIV?	
(a) Yes	
(b) No	
19) If yes, what made you decide to have an HIV test?	

20) If no, what made you refuse to have an HIV test?	

21) If you had a choice, would you have preferred to be attended to by?	
a) Female	
b) Male	
c) Somebody younger than you	
d) Somebody older than you	
e) Somebody of your age	
f) Anybody	
22) How satisfied are you with the privacy and counselling you receive at the clinic?	
a) Very satisfied	
b) Satisfied	
c) Unsatisfied	
d) Very unsatisfied	
23) How many hours did you spend at the clinic today?	
a) < 30 min	
b) 30-60 min	
c) 60-2 hours	
d) 2-4 hours	

Thank you very much.