FACTORS AFFECTING ACCEPTANCE OF COUNSELING AND TESTING FOR HIV/AIDS AMONG PREGNANT WOMEN:

BY

MARUFATU ESSIE BRAIMAH

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DECLARATION

I hereby declare this work is as the result of my own research and findings under the supervision of Dr. Juliette Tuakli, Dr. John Eleezer and Professor Isabella A. Quakyi. Appropriate acknowledgement is given all authors whose books were read and cited in compiling this project work. This dissertation either in whole or part has not been presented elsewhere for another degree.

Marufatu Essie Braimah

STUDENT

Dr. Juliette Tuakli

ACADEMIC SUPERVISOR

Professor Isabella A. Quakyi.

ACADEMIC SUPERVISOR

DEDICATION

I first and foremost dedicate this work to the almighty God for his protection, wonderful mercies and care he conferred on me during the course of the project. Secondly, this work is dedicated to the innocent HIV- infected pregnant women worldwide especially my hardworking Ghanaian women. Surely daybreak will come and this darkness will be a thing of the PAST.

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ABSTRACT

Since Human Immunodeficiency Syndrome (HIV) detection in 1981, 25milion people have died and 65 million people are living with the disease. The HIV prevalence among antenatal care attendants rose to 40% globally with 1500 children infected each day. At the end of 2007, women accounted for 50% of all adults living with HIV worldwide, and 61% in sub-Saharan Africa. In Ghana about 3,129,390 are reported living with the disease in 2007 with HIV positivity prevalence rate of 2.6% among pregnant women.

Voluntary counseling and testing (VCT) have been declared the mission weapon. It is the gateway for treatment, care and support and provided free in Ghana. This study sought to examine the factors that influence the testing for HIV by pregnant women in the Ho Municipality.

The study is a descriptive cross-sectional survey. It used a structured questionnaire, interview guide, Focus Group Discussion (FGD) and observations to collect data on knowledge of HIV, perception about the test and decision to test. A total of 310 antenatal women were exit interviewed in the two Prevention of Mother-To-Child (PMTCT) Centers in Ho with FGD in the communities. Majority had their sources of knowledge from radio (91.3%), Television (TV) (86.1%), "Today's health talk" at the clinic (81, 9%) whilst Health Workers talk (41.7%), constituted the least. They know preventive measures like abstinence, condom use and faithfulness to one's partner. They mentioned benefits of testing such as treatment, and knowing one's sero-status but only one person knew about antiretroviral therapy (ART/Prophylaxis). Less than 50% of the respondents who heard of HIV did the test. Of those who tested, age, education, religion, occupation

were significantly correlated with testing in addition to the benefits that they mentioned motivated them to do it.

In conclusion, the participants had universal knowledge about the modes of transmission of HIV but with misconceptions. They perceived the disease as dangerous and deadly therefore an HIV positive partner should be divorced. Stigma (77.2%), discrimination (67.1%), fear of death (86.8%) and husbands anger (51.8%) did not deter some from testing as all the men who took part in the FGD supported the test.

It is recommended that Ministry of Health (MOH)/Ghana Health Service (GHS) collaborates with Ghana Education Service and the media to ensure that there is effective commitment to the policy on HIV/AIDS education and that all stakeholders are trained for empowerment.

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LIST OF ABBREVIATIONS

AID	Acquired Immunodeficiency Syndrome
ANC	Antenatal care
ART	Antiretroviral therapy
ARV	Antiretroviral
CT	Counseling and testing
DHMT	District Health Management Team
FGD	Focus Group Discussion
GES	Ghana Education Service
GHS	Ghana Health Service
HIV	Human Immunodeficiency Virus
HMH	Ho Municipal Hospital
HSS	HIV Sentinel Survey
JSS	Junior Secondary School
MCIS	Ministry of Communication and Information Service
MHD	Municipal Health Directorate
MOHSS	Ministry of Health and Social Services
MOH	Ministry of Health
MSLC	Middle School Leaving Certificate
MTCT	Mother-to-child transmission of HIV/AIDS
NACP	National AIDS/STI Control Programme
PMTCT	Prevention of Mother- to- Child Transmission of HIV/AIDS
PLWHA	People Living With HIV/AIDS

SM Safe Motherhood

TB Tuberculosis

TBA Traditional Birth Attendant

UNAIDS United Nations Programme on HIV/AIDS

UNGASS the United Nations General Assembly Special Session on AIDS

USA United States of America

USAID United States Agency for International Development.

VCT Voluntary Counseling and Testing for HIV/AIDS.

OPERATIONAL DEFINITIONS

OPT OUT: It is provider-initiated testing. It is a routine offer where the client has the ability to object to the services.

OPT IN: It is client-initiated testing. The client willingly comes forward to access the services.

CHAPTER ONE

1.0 INTRODUCTION

Background

Human Immunodeficiency Virus (HIV) is the virus that causes Acquired Immuno-Deficiency Syndrome (AIDS). When the virus enters the human body, it weakens the immune system and progresses to a full blown AIDS by destroying the immune cells eventually. Effect of HIV/AIDS pandemic and epidemic are shortened lifespan, illness and suffering, loss of income, increasing number of orphans, all of which have negative impact on countries' economy (Ghana Health Service, 2005). Opportunistic infections such as TB and other bacterial, cancers and viral conditions set in, which leads to untimely death (Ghana Health Service, 2005; NACP, 2003). As at now there is no known vaccine or cure. The three modes of transmission are; unprotected sex with an infected person, infected body fluids and tissues and mother to child transmission (MTCT) (National HIV Counseling and Testing Training Manual, 2005; Reducing Stigma and Discrimination Related to HIV/AIDS and Improved Infection Prevention, 2006). It is possible to find HIV in saliva, tears and urine of infected individuals but there are no recorded cases of infection by these secretions, and the risk of infection is negligible (Facts about AIDS and HIV, 2007; Reducing Stigma and Discrimination Related to HIV/AIDS and Improved Infection Prevention, 2006). According to Caley and Jr, (2004) during a sexual act, only male or female condoms can reduce the chances of HIV infection (80% heterosexually) and becoming pregnant with high benefits if condoms are used correctly on every occasion.

The WHO recommends male circumcision as a further prevention tool but is yet to promote it pending results of further studies (Foundation for Professional Development, Ghana 2008). First isolation of HIV in 1983 was men and women with multiple sexual partners in East and Central Africa and men who had sex with men (Men Sleeping with Men (MSM) in some areas of Western Europe, the Americans and Australia. Women's vulnerability includes commercial sex work, (Campbell and Kelly, 1995), (Lamptey and Potts, 1990). Traditional practices and customs such as "dry sex" practices, vaginal douching with non antiseptic compounds, female circumcision and "widow cleansing" all have effect on increasing women's risk of HIV infection (Campbell and Kelly, 1995; Runyanga, Pitts and McMaster, 1992; Runyanga and Kasule, 1995; Civic and Wilson, 1996; Gresenguet et al, 1997; Dallabeta et al, 1995; Sandala et al, 1995). The women's desire to reproduce coupled with societal pressure make it difficult for women to practice unprotected sex. Even if these women are diagnosed HIV positive, most of them cannot change their reproductive choices (Taha et al, 1997; Ahluwalia et al, 1998). Nevertheless Matheson found that MTCT rate of 30% was shown in women who had more than 80 episodes of unprotected sex during pregnancy compared with 9.1% in those with protected intercourse (Matheson et al, 1996).

The deadly HIV was first detected in 1981 and so far, about 65 million people have been infected, with 25 million deaths. In 2005, it was estimated that 38.6 million people were living with HIV and more were unaware of their status. The same year, about 2.8 million people and over 4 million were newly infected and 17.3 million women make up almost half of the total number living with the virus, 13.2 million of which live in Sub-Saharan Africa, UNAIDS, (2006). UNAIDS continue to state that Sub-Saharan Africa remains the

most affected region in the world. Two-thirds of all people living with HIV are in Sub-Saharan Africa where 24.5 million people were living with HIV in 2005. Each day 1500 children worldwide become infected with the disease; the vast majority of them were newborns. In 2005 again, 9% of pregnant women in low and middle income countries were offered services to prevent transmission of the infection to their newborns.

The estimated number of persons living with HIV and AIDS worldwide in 2007 was 33.2 million. Again it was identified in 2007 that the worst affected region in the world is Sub-Saharan Africa with two-thirds (63%) of all persons infected with HIV. In 2007, an estimated 1.7 million adults and children became infected with HIV in Sub-Saharan Africa, with 16 million dying of AIDS (NACP, 2007).

HIV testing is deemed to promote behavioral change to curb the spread of the disease and Voluntary counseling and testing (VCT) have been declared the mission weapon by Holdbrooke and Funman (2004). It is the gateway to treatment, care and support. A VCT intervention includes two counseling sessions; the initial (pre-test) counseling session followed by the HIV test; and a second (post-test) counseling session to provide the client with his or her test result (CDC). The HIV test detects antibodies or antigens associated with HIV in whole blood. The test is influenced by national testing policy (client-initiated or provider- initiated testing), availability of trained service providers or counselors such as nurses, midwives, doctors, to mention but a few. Initially, women were counseled and given the option to test for HIV. Now the preferred ANC strategy is the provider initiated where the HIV testing is routine opt-out. Service providers are obliged to adhere to the guiding principles of Counseling and Testing (CT) which are

Informed Consent, Confidentiality and the provision of pre and post-test Counseling. In the context of MTCT prevention, CT is integrated into Maternal and Child Health (MCH) and Reproductive and Child Health (RCH) settings to render services to pregnant women and women of childbearing age, during antenatal, labour and delivery, family planning and others.

It is believed that, approximately 1.25 million of the 18 million women who deliver annually are HIV-positive. Boerhinger (2000), UNAIDS (2002), USAID (2002), stated that of the more than 500,000 maternal deaths that occur each year, half occur in Africa. HIV prevalence has risen to as high as 40% among antenatal care attendants in some parts of Africa. The most tragic are the infants who became HIV positive through maternal transmission of the HIV virus that occur during pregnancy, birth and during breastfeeding. It is estimated that in 2001, 800,000 were infected with HIV through MTCT with almost 90% of them in Sub-Saharan Africa. At country level, estimated 40,000 AIDS related infant deaths occur in Uganda and 56,000 in Kenya each year. It is also believed that in Sub –Saharan Africa each year more than 500,000 women who live with HIV/AIDS become pregnant and give birth to children. About 20-25% of these children will die within the first two years of life and 60-70% before attaining their fifth birthday (Harms et al, 2003).

The high prevalence of both obstetrics related maternal mortality and HIV among pregnant women in most African nations clearly indicate the need for programs to address both problems. In response to the United Nations General Assembly Special

Session's (UNGASS) goal of reducing MTCT by 20% by 2010 the World Health Organization (WHO) developed an approach to PMTCT of HIV\AIDS.

Currently, WHO recommends four-prongs for care and support which are as follows:

1. Primary prevention to help all women remain HIV negative.
2. Prevention of unwanted pregnancies among women who are already HIV positive.
3. Reducing prenatal transmission of HIV among HIV + pregnant and breastfeeding women.
4. Provision of treatment, care and support.

Effective ways to manage the above prongs are;

1. To routinely recommend rapid HIV counseling and testing in antenatal and maternal settings.
2. Combination of short course antiretroviral (ARV) prophylaxis for mother and infant and antiretroviral therapy (ART) for eligible mothers.
3. Counseling and support for infant feeding.
4. Link with wrap around services such as nutrition, family planning services for women with HIV and micro economic activities.
5. Strong links to care treatment and support services.

Clinical trials have demonstrated that ARV prophylaxis given to pregnant women and their babies can reduce the risk of MTCT by approximately 75% (Moore, 2003). Moore

continued that for PMTCT Program to rapidly meet UNGASS' goal, ANC utilization would need to be at least 90%, acceptance of VCT-70% and acceptance of ART (Nevirapine)-75%. It has been observed that putting HIV patients on antiretroviral therapy improves their physical and mental health, hospitalization is decreased leading to increase in income, as people go back to employment and increase productivity.

The WHO reports that at the end of 2006, coverage of children in need of AIDS treatment were only 15 percent. About 28 percent of people in need of antiretroviral treatment were accessing these medicines and an estimated 11 percent of HIV-infected pregnant women in low- and middle-income countries were receiving antiretrovirals for PMTCT of HIV.

In Ghana, education on HIV/AIDS across the country has increased awareness of the disease as has been found in other parts of Africa (De Cock et al, 2002) .Various national surveys indicate that 92%-98% of Ghanaians have knowledge of HIV\AIDS and its transmission. This has not however, been translated into actual behavioural change (National AIDS/STI Control Programme (2005).

Ghana with a total land mass of 238,537 square kilometers has a population of 22.9 million and HIV prevalence of 2.6% among antenatal clients only. The age groups mostly affected are 25 to 29 and 35 to 39 years who are in the reproductive age group with distribution of 3.5% and 2.3% in urban and rural areas respectively (NACP HIV Sentinel Survey Report, 2007). Zaba and Gregson (2002) in a study found that the prevalence of

HIV among pregnant women is a good indicator of HIV epidemic in the general population of men and women aged 15 to 49 years.

The National Strategic framework (NSF) 11, 2006-2010, a continuation of NSF I, (2000-2005) is to implement HIV prevention activities through seven interventional areas. These are: Policy, Advocacy and Enabling Environment; Coordination and Management of the Decentralised Response; Mitigating the Social, Cultural, Legal and Economic Impacts; Prevention and Behavioural Change Communication; Treatment, care and support; Research, Surveillance, Monitoring and Evaluation and Mobilisation of Resources and Funding Arrangement. The Government of Ghana and other stakeholders including the Global Fund To Fight AIDS,Tuberculosis and Malaria (GFATM), The World Bank Treatment Acceleration Programme (TAP). The Department for International Development (DFID) of the United Kingdom and the World Health organization (WHO) continue to provide funds to support the programmes to fight against HIV/AIDS in Ghana (Ghana Health Service Annual Report, 2006). As at the year ending 2007, the government has set up 422 PMTCT /CT and 95 antiretroviral therapy centres to address MTCT of HIV (NACP, 2007).

1.2 Statement of the Problem

In Ghana, CT and PMTCT interventions started 2001 with two sites in the Manya Krobo districts of the Eastern Region as a response to the global concern of HIV transmission from pregnant women to their children. Ghana can now boast of 422 PMTCT sites at the end of 2007. HIV positivity rate in Ghana among pregnant women increased from 3.4% in 2005 to 3.8% in 2006 but decreased to 2.6% in 2007. HIV site prevalence in 2007 ranged from 0.3% in Krachi west rural to 8.9% in Agomanya. In all 3,120,390 Ghanaians

in 2007 were reported living with HIV/AIDS. Of these, 247,220 were adults and 19,631 children with cumulative death of 147,357 (NACP, 2007).

NACP, 2007 continued to state that the lives of mothers who accept VCT early can be prolonged through prompt and adequate management of HIV positive pregnant women and a good number of children, (60 -75%) born to HIV infected mothers can be protected from being infected through the PMTCT package. In 2004, 116 pregnant women received single dose of Nevirapine, 27 children on ART and 30 children on Cotrimoxazole .In 2005 the numbers showed greater than 500% increase constituting 584 pregnant women on Nevirapine, children on ART 146 and those on Cotrimoxazole 161. In 2007 pregnant women receiving dual therapy for PMTCT were 2896, children put on ART were 597 and those on Cotrimoxazole were 657.With the figures mentioned there is urgent need to prepare for future increases even though the resources are limited. National AIDS/STI Control Programme (NACP) of Ghana and Health Service (GHS) (2008) with the above population and demographic parameters projected for 10,000 women and 3,238 children to be on treatment with 3,594 children to be born to HIV positive mothers and to be put on Cotrimoxazole by 2,010.

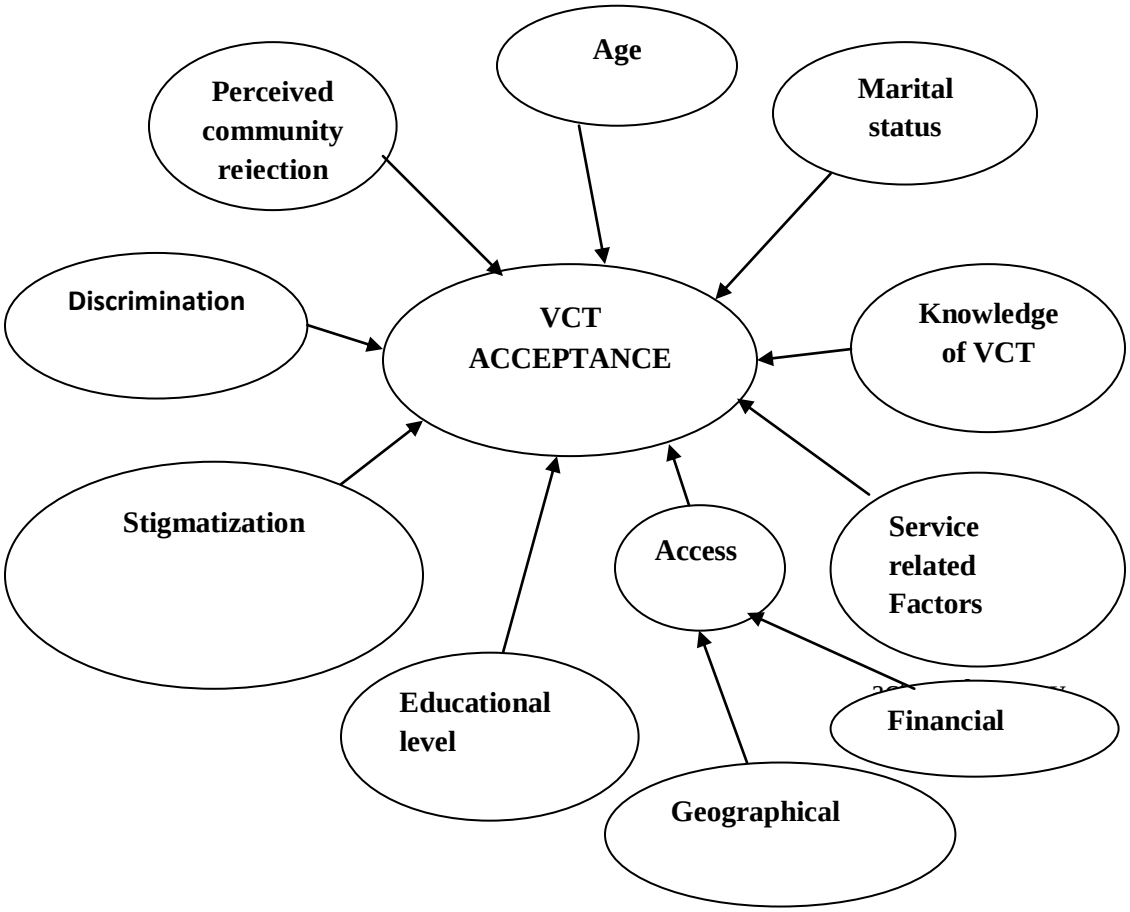
With the above projection it is therefore necessary; to understand the factors influencing the uptake of VCT for pregnant women from the client perspective as HIV testing is the only gateway to know ones status for treatment, care and support. This will help in designing programmes and strategies in a more innovative and client oriented manner so as to scale up the utilization of the PMTCT package and improve maternal and child health.

The HIV prevalence rate in Ho was 5.8% in 2004; 2.6% in 2005; 4.2% in 2006 and 2.4% in 2007 (NACP, 2007). Ho municipality started PMTCT in 2005 to provide care, support and treatment with antiretroviral to pregnant women who test HIV positive, however, the testing rate is very low. From the Ho Municipality Health Directorate (MHD) Annual Report, (2006) out of 6,228 ANC registrants, 440 pregnant women availed themselves for counseling. Out of this figure, only 143 (32.5%) really opted for the actual testing though the testing is free. Six of these women tested positive. One mother was found legible for treatment and received it.

In the year 2007, 2568 pregnant women were counseled but only 717 (28%) opted for the test. Twenty six (26) of them tested positive and 13 mothers were put on antiretroviral together with 5 babies. Considering the increase in infection and treatment rates and the decrease in proportions opting for the test, there is the need to investigate the factors contributing to the low acceptance of testing as all the pregnant women are not seizing this opportunity to know their status during antenatal care. The study will help to provide data for interventions.

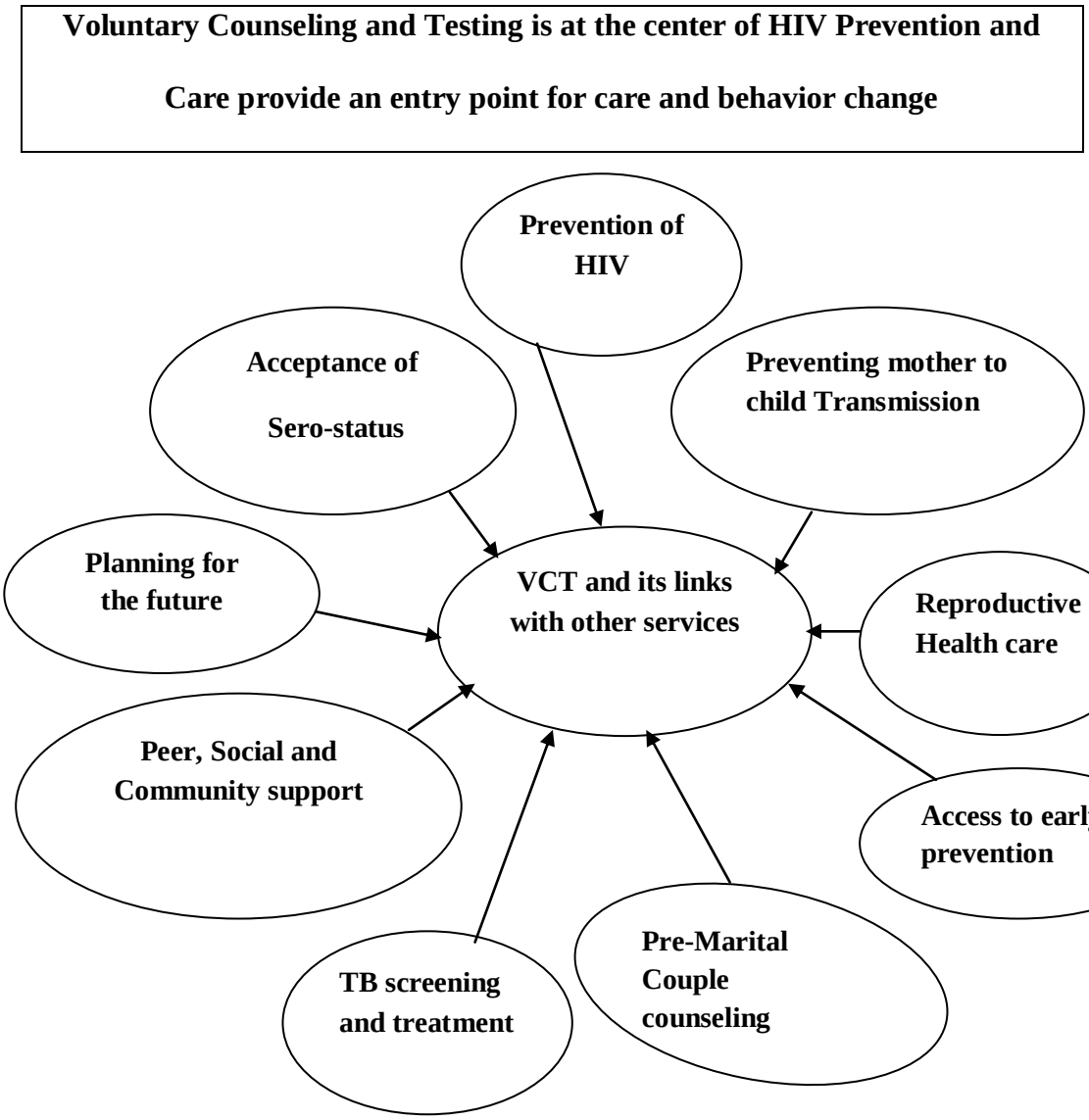
The diagrams below show Problem analyses of the factors likely to influence VCT testing for HIV/AIDS among pregnant women followed by the conceptual framework that analyse the links when the test is done.

Diagram 1: Problem Analysis



Factors that may contribute to low VCT acceptance by respondents

Diagram 2: VCT and its links



Adapted from: national HIV counseling and testing training manual, September 2005

1.3 Justification of the Study

HIV has overwhelming negative impacts on the lives of mothers, children**,** families and the health system. Pregnant women who are HIV positive are prone to long illness and suffering, loss of work and income resulting in a weakened integrity and support structure of the family (GHS, 2006). Such women also contribute significantly to maternal deaths. As a result, the number of orphans continue to increase with an accompanying economic burden, grief, poverty, and despair on families. Health systems are increasingly saddled with caring for infected mothers and children who may not eventually survive. Of all children born to HIV positive mothers, 25- 40% of them are likely to be infected during pregnancy, labour and delivery, as well as breastfeeding. This rate of mother -to -child transmission reduces child survival rates.

Fortunately however, a good number of children, (60-75%) born to HIV infected mothers can be protected from being infected through the PMTCT package. Again, the lives of mothers who accept VCT early can be prolonged through prompt and adequate management of HIV positive pregnant women.

The Ho Municipality have not done any research in this area as at now therefore the need to investigate and report the factors influencing the uptake of VCT for pregnant women from the client's perspective. This will help in designing programmes and strategies in a more innovative and client oriented manner so as to scale up the utilization of the PMTCT package and improve maternal and child health in the region.

1.4 Aim of the study

To examine those factors that influence the acceptance of CT for PMTCT.

1.4.1 Specific Objectives:

1. To explore the knowledge of pregnant women about MTCT of HIV/AIDS.

2. To determine the perception of pregnant women about testing for HIV.

3 To examine factors such as socio-demographic, knowledge, availability of the services and social support that influence clients' decision to test for HIV/AIDS.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.0 Introduction

Young women (aged 15-24) are bearing the brunt of new infections in sub-Saharan Africa. Recent population studies suggest that there are on average 36 young women living with HIV, for every 10 young men (National AIDS/STI Control Programme, 2005). UNAIDS, WHO, 2007 reported that women and girls now comprise 50% of those aged 15 and older.

In Ghana, VCT is more common among urban than rural women. Regional distribution for VCT uptake is more common among the Brong Ahafo as the region with the highest uptake of VCT services (62.6%). The percentage of women receiving VCT was positively related to both education and wealth status (GSS, NMIMR, ORC Macro, 2004).

2.1 Knowledge about HIV/AIDS.

Provision of adequate information, education and communication (IEC) and community mobilization are thought to be important elements in ensuring uptake of MTCT services associated with MTCT interventions. Worldwide, only 5% of people with HIV/AIDS are estimated to be aware of their sero-status (WHO, 2004). Unfortunately, many studies have shown that the knowledge about mother to child transmission of HIV, including prevalence, points of transmission during pregnancy, delivery and breastfeeding is lacking (Kayode et al, 2002).

In many communities, even where PMTCT programs are active, knowledge about MTCT remains low at the community level due to variations in awareness of the transmission mechanisms. In a study in Uganda which has a high HIV prevalence, 40% among pregnant women they knew that MTCT was possible during pregnancy, 58% knew it was possible during delivery, and 19% knew it could occur during breastfeeding (Kigozi et al, 2002). In the same Ugandan study, 29% of respondents had heard of drugs for PMTCT.

Poor knowledge of MTCT prevention has also been blamed on inadequate knowledge of health workers on the subject. Findings from a study on the assessment of a pilot PMTCT programme in South Africa concluded that many health workers reported feeling confused about what they should tell the mothers (Chopra et al, 2002). For instance, the issue of breast-feeding is an enigma; health educators face the dilemma of telling mothers that breast milk is absolutely the best they can give to their children while they also face the contradictory challenge of informing them that there is a risk of their children getting HIV from the breast milk (WHO, 2003).

A PMTCT program in Ndola, Zambia found, a mid-project evaluation findings increased community awareness about mother-to-child HIV transmission during pregnancy from 68% to 72% and MTCT during breastfeeding from 57% to 77% but awareness of MTCT during delivery remained low, increasing substantially from 17% to 44% (Population council, Ndola Demonstration Project, (2003).

In Nigeria, a study carried out among 345 pregnant women attending antenatal clinics at two health facilities in Lagos, Nigeria to determine their knowledge and acceptability of

HIV voluntary counselling and testing in pregnancy showed that majority of the women (89.9%) had good knowledge of the modes of HIV transmission; however, knowledge of specific aspects of PMTCT was poor. Nearly half of the women (41.7%) were not aware of the association between breast milk and HIV transmission (Ekanem et al, 2004).

Awareness of AIDS in Ghana is universal, 98% of women and 99% of men have heard of AIDS. General knowledge about HIV transmission during pregnancy, delivery and breastfeeding is relatively high; it ranges between (69-75)% among women and (74-82)% among men, however, only few women and men (16% each) know that the risk of MTCT can be reduced if a mother takes special drugs during her pregnancy (GSS, NMIMR, ORC Macro, 2004).

A survey at Komfo Anokye Teaching Hospital, Kumasi on 334 pregnant women's knowledge and attitudes to HIV testing revealed that awareness of MTCT of HIV was relatively low (51.8%)(Addo, 2005).

Solomie et al, 2005 in a study in Addis Ababa, all 384 respondents studied had heard about HIV/AIDS of which, 82.3% mentioned the major routes of transmission and 89.8% knew that HIV could be transmitted from an infected mother to her baby. Most of the respondents (76.8%) knew that MTCT of HIV is preventable, 64.6% knew the protective effect of prophylactic anti-retroviral drugs, and 37.1% knew that abstinence from breastfeeding can prevent MTCT, 10.4% knew elective caesarean section (C/S) as a preventive method, and 6.9% stated that protection of the mother from HIV is the same

as protecting her baby. Educational level was found to be a contributing factor to MTCT and PMTCT knowledge.

According to Banjunirwe and Muzoora, (2005), in a study in rural and urban Uganda among 404 pregnant women attending antenatal clinics, the overall knowledge regarding PMTCT was high. In all 80% knew that a mother with HIV can pass the virus to the child, 12% did not believe it was possible and 8% did not know about the mode of transmission. Radio was the highest source of information in both rural and urban areas but higher in urban areas.

In a similar survey carried out among 804 women attending antenatal clinics in Ogun State in Nigeria, approximately 90% of the women respondents had heard of HIV/AIDS but only about 27% knew that HIV could be transmitted from mother to child (Adeneye et al, 2006).

A PMTCT study in Tanzania also reported that pregnant women's general knowledge of HIV was high, but specific knowledge of mother to child transmission (MTCT) was relatively low (Kominami, 2007).

2.2 Perception about HIV Testing

VCT is the entry point for PMTCT programmes; pregnant women are unlikely to take steps to prevent HIV transmission if they do not know their own status. Rates of VCT uptake in antenatal settings vary within and between countries. Barriers to uptake include fear of learning one's status; fear of disclosing a possible positive status to

husbands/partners; fear of stigma or discrimination; sense of fatalism about the usefulness of knowing one's status; and the perception of being at low risk for HIV (Maman et al, 2001). Increasing acceptance of VCT may be one of the most effective ways to decrease perinatal transmission (Wilfert C, 2002).

2.2.1 Fear

A routine screening for HIV infection in booked antenatal women at the Obstetrics Department of the University of Nigeria Teaching Hospital in Enugu showed that 39% of some 600 pregnant women seen failed to have routine HIV screening even when they had consented to it (Ibekwe et al, 2001). Fear is often sited as one of the reasons for VCT uptake. Among study participants in Tanzania, 54% who did not go back for their test results stated fear as the biggest factor (Mugusi et al, 2002). African women were also found to have negative attitude towards medication during pregnancy, bottle-feeding, and caesarean section (Giaquinto et al, 2002).

Factors shown to influence decision to seek and accept VCT as part of PMTCT programs, included fear of stigma, fear of more rapid death once knowing one's HIV status. Unwillingness to participate in an intervention to prevent the baby from getting HIV depended on availability of maternal treatments (Stringer et al., 2005).

A study on immigrants in Italy, France, Sweden, Spain and the UK also demonstrated that the main barriers to HIV testing among women were;

1. The fear of testing positive,

2. Confidentiality and

3. Fear of being abandoned by their partners (Giaquinto et al 2002)

2.2.2 Stigma

According to Khan, (2000), stigma is driven by some cultural or religious norms and value as well as fear of AIDS and secrecy. In a study conducted in Nigeria to determine VCT acceptability among pregnant women, 53 subjects gave informed consent to HIV testing. Five clients, 9.4% did not turn up for their results and 3.8% consenters did not want to turn up for their results and 3.8% consenters did not care to know their sero status There are few studies that are particularly related to disclosure of HIV/AIDS status to sexual partner's fears of VCT attendance due to stigma and discrimination (Maman et al, 2001). Stigma, fear of learning one's HIV status, as well as fear of disclosing one's status may deter some pregnant women from accessing PMTCT (ICRW, 2002).

Nyblade et al, (2002) corroborated that fear of disclosure of HIV status to family and community including fear of the stigma attached to being HIV positive are well known factors in low uptake of VCT. However, fear of potential discrimination has been found to be greater than actual discrimination in several settings.

Drah, (2002, unpublished data) in his qualitative study in the Manya and Yilo Krobo found that PMTCT and MTCT were acronyms that, outside of the medical community, few had heard of and even fewer understood. He revealed that community stigma attached to HIV infected persons affected compliance with all aspects of the PMTCT

program and confidentiality was often confused with secrecy. Non breastfeeding was also a highly stigmatizing behavior for breastfeeding mothers in the community he added.

Herrek and Capitanio, (2005) asserted that those most likely to hold misconceptions about HIV transmission and to harbour HIV/AIDS stigma are less educated people and others with high levels of religiosity or conservative political ideology. UNAIDS, (2006) also reported that AIDS stigma exists around the world in a variety of ways including ostracism, rejection, discrimination and avoidance of HIV infected people

2.3 Decision to Test

For PMTCT Program to rapidly meet UNGASS' goal, ANC utilization would need to be at least 90%, acceptance of VCT-70% and acceptance of ART (nevirapine)-75% (Moore, 2003). In a survey conducted in Uganda, 17% of 219 people interviewed had undergone HIV testing. Factors that influenced the testing were sexual partner, the cost of VCT, physical accessibility of VCT, awareness of VCT and risk of HIV infection (Nuwaha, et al, 2002.

2.3.1 Accessibility and Availability of VCT Services

In a cross sectional household survey of women aged 18 years or more by Karamagi et al, (2006) in Mbale Town or in the surrounding Bungokho County with also in-depth interviews among six health workers in Mbale Hospital, 457 women with a median age of 24 years participated. The barriers to antenatal HIV testing were unavailability of VCT services (44%), lack of HIV counseling (42%) and perceived lack of benefits for HIV

infected women and their infants. Women counseled on HIV and with husbands as their primary confidants were also independently associated with HIV testing.

Namibia (MOHSS, 2004) reported lack of transport, low income, unemployment and low educational level as key factors that may contribute to the poor and inconsistent utilization of maternal health care services for PMTCT.

2.3.2 Acceptability.

Four hundred antenatal clinic attendants were surveyed for their attitude to testing and notification for HIV infection test results in Nairobi Kenya. 63.7% of respondents stated that if found HIV seropositive they would seek a termination of pregnancy (Marjan, 1996).

In Zimbabwe, 186 women attending antenatal clinic were offered VCT routinely. Though most women endorsed the multiple benefits of VCT, uptake was low, with only 23% of women consenting to the VCT (Martin-Hertz et al, 2000).

Some women who were also tested in antenatal care settings may not have the opportunity to psychologically prepare themselves or their partners for the consequences of testing and knowing their sero-status, compared to those who willingly seek VCT. In most settings, there is a core group of women who choose not to disclose their sero-status to anybody: (3 – 10) % in the U. S. and (10 – 7) % in developing countries (Antelman, 2001).

Commonly encountered barriers documented in literature include missed opportunities to offer VCT during routine ANC care, low levels of acceptance of HIV testing where it is available and failure to return for HIV test results in settings where rapid testing is not available. Others include inadequate acceptance of ART when it is offered to eligible women, poor adherence to uptake of ART by both mothers and newborns and low acceptance of recommended infant feeding behaviours (Sweat et al, 2002).

Among one thousand women in KwaZulu Natal, where HIV prevalence at ANC was 38% during self-assessment for risk among ANC attendees 20% of them said their partners had other sexual partners, yet only 15% believed that they were personally at risk of contracting HIV (Ottolenghi, 2002).

In many PMTCT programs where VCT is available, low community acceptance and use of VCT services is a major barrier to identifying, counselling, and treating HIV positive pregnant women and their partners (Forsythe et al, (2002). Mofenson, (2003) was of the view that limited access to and acceptability of VCT in some countries may block the uptake of PMTCT.

In Africa, the uptake of PMTCT services has so far been rather low (Temmerman et al, 2003). Perceptions of personal susceptibility to HIV/AIDS infection is the main factor that motivate people to overcome barriers for seeking VCT. In one program in Zambia, community awareness of the availability of VCT increased from 45% to 75% during the firsts two years, but use of VCT remained low at 9% (Population Council, Ndola Demonstration Project, (2003). On average, less than 50% of the pregnant women

accepted VCT. Drah, (unpublished data, 2003) in his quantitative study in Krobo also realised a low uptake of VCT as part of MTCT services. This pointed to many missed opportunities for VCT and a need for different approaches, such as male directed VCT, couples counselling sessions and youth directed VCT services.

For a given programme, there may be variation in the success with some programme components performing well, while others fail. For example, acceptability of HIV testing may be high but collection of test results and mother-child follow-ups are not very successful as it should be (Perez et al, 2004).

It was also observed that generally, women who accept HIV testing do so to benefit their babies. They do not see the test as an HIV risk-reduction tool or as a way to prevent the spread of HIV (USAID/Synergy, 2004).

In a Malawi study the respondents reported of an acute personal awareness of the impact of AIDS, 42% were worried about getting the infection and another 42% perceived being infected. Their fears were three funerals they attended every month and also seven friends or family members died of the AIDS disease and 9 believed they were living with the HIV virus. Monetary incentives in the form of vouchers were randomised for the respondents to motivate them to go for their results. People with zero incentives may not be motivated to go back for testing results (Thornton, 2005).

The outcome of a study evaluating programmes to prevent mother-to-child HIV transmission in two large Bangkok hospitals between 1999 – 2001 showed that although uptake of services was high, inconsistent antenatal care, fear of stigmatization, and

difficulty in disclosing HIV status prevented some women from using the services (Teeraratkul et al, 2005).

In Lusaka, Zambia, single dose Nevirapine was successfully administered to only 30% of HIV-positive pregnant women who attended public-sector clinics but it was also found that around one third of women who were served with the drug never swallowed it (Stringer et al, 2005). This low rate was partly due to many women not being tested. Socio-economic context can present a formidable barrier to the provision of PMTCT services (Skinner et al, 2005).

In La Cote d'Ivoire, Painter et al, (2005) also observed that socio-demographic factors may be associated with participation by HIV positive women in an intervention for PMTCT. In Namibia (MOHSS, 2004) very low uptake of VCT (<10%) during a pilot PMTCT programme was attributed to lack of trained counselors in Namibia. However, this figure is increasing rapidly now with 35% of VCT in PMTCT uptake in 2005 (MOHSS, 2006).

A Nigeria-based study aimed at determining the willingness of pregnant women to accept VCT showed that majority of the women (87%) approved of VCT; of those who approved, 93% were aware that VCT could reduce the risk of transmission of HIV to their babies. All respondents who accepted VCT were willing to be tested if results remained confidential and 89% would accept if they were tested simultaneously with their partners. Overall, the acceptance of VCT appears to depend on the understanding that VCT has proven benefits for the unborn child (Okonkwo et al, 2007).

2.3.3 Role of male partner

For the women living with their husbands, the majority of them (89%) informed their husbands that they had come to the antenatal clinic that day; 68% of the women thought that they should consult their husbands before having an HIV test while 81% of the women thought that their husbands would approve of their being tested. The remaining (19%) feared that their husbands would not approve of their being tested. Also, the majority of women (72%) thought that their husbands would accept the HIV test for themselves (Bajunirwe and Muzoora, 2005).

Again, expanding the focus of PMTCT to include male partners as well as pregnant women could help to distribute the burden of HIV/AIDS-related stigma more equitably within partnerships (Ottolenghi and Rutenberg, 2001; Desclaux 2004).

In many PMTCT programs where VCT is available, low community acceptance and use of VCT services is a major hindrance to identifying, counseling and treating pregnant women with HIV positive and treat them together with their partners (Forsythe, 2002; Gray, 2002; Kankasa et al, (2002)

2.3.4 Treatment

In a study conducted by Fauci, (2000) in India, the pregnant women would refuse to test if they did not perceive themselves at risk for HIV or they needed their husband's permission to undergo the test however 2001, in another study among the pregnant women; 86% reported that they would agree to test for HIV in order to protect their unborn babies.

2.3.5 Service-related Factors

The impact of health worker attitudes and motivation on the effectiveness of program interventions to reduce MTCT has been demonstrated as the already-overburdened health workers in both resource-rich and resource -poor settings often have inadequate time or insufficient skills to carry out all of the extra tasks related to PMTCT programs (Rogers, 1997; Burger et al, 1997). Improving skills and quality of care delivered by health workers is the cornerstone of the technical component of any maternal health program. Because of this knowledge, the PMTCT Training Package for Health Care Providers in Ghana has addressed the burn-out issues and motivated the counselors for the task.

Among pregnant women in West Uganda the participants were found anxious about taking up VCT, due to fear of confidentiality and fear that the maternity staff might refuse to assist them when they come to deliver with unknown status (Pool et al, 2001). It was alleged that some nurses disclose clients HIV status in public without informed consent (Stanhope and Lancaster, 2000).

Clients on the other hand do not accept counselors who are younger than themselves (MOHSS, 2004).

2.3.6 Employment and its relationship with uptake of HIV testing.

In a study among pregnant women in Rwanda women whose partners were gainfully employed were four times more likely to accept HIV testing, than those with unemployed partners (Kowalezyk et al, 2002).

2.3.7 Social Support.

An article " South Africa : HIV major factor in rising child deaths" in PLUS NEWS (2008) reported that Dr Mitchell Besser, founder of mothers2mothers (m2m) a non governmental organization that runs mentoring and support programmes for HIV positive pregnant women and new mothers in four African countries identified several reasons for South Africa's high infant mortality rate. These are poor uptake of HIV testing, lack of education and support of HIV-positive mothers in making the best infant-feeding choices, insufficient testing and monitoring of HIV-exposed babies, and too few nurses and midwives.

Dr Besser told conference delegates that

> "*We keep giving more and more jobs to nurses*," *"Their job keeps getting bigger and bigger, but the number of nurses doesn't."*

The m2m initiative aimed at relieving some of the workload on clinical staff by training HIV-positive mothers to mentor new mothers and pregnant women who are HIV positive. An evaluation of the programme found it successful as those women who received support from the group were found more likely to disclose their sero-status and accept PMTCT treatment.

Although it is individual women who are most directly involved in adopting recommended PMTCT behaviors, the support of family and community is essential. The support of male partners and elder female family members who often affect practices associated with pregnancy and birth is particularly important. As with safe motherhood, helping women to receive social support and creating an enabling household environment to foster improved PMTCT practices are key objectives. Remembering to take ARVs regularly, arriving on time at a health facility to deliver, and assuring that the newborns of HIV+ mothers get the ART and feeding regimen they require soon after birth can all be facilitated by family members (Moore, 2003).

CHAPTER THREE

3.0 METHODOLOGY.

3.1 Study design

The study is a descriptive cross-sectional study design using quantitative and qualitative methods for data collection. The quantitative research approach was considered to be appropriate for this study because it relies upon measurement to analyse different variables and uses various scales (Bless and Highson, 2000). This allows for formal and systematic ways of collecting information on pregnant women's knowledge, attitude and practices about HIV and VCT in PMTCT to document descriptions of the barriers that prevent pregnant women from utilizing the VCT in PMTCT services and the quality of counseling for the services.

3.2 Study Area

Ho municipality is the study area. It is the largest municipality in the Volta region in terms of the land area (2,564 square kilometers). It is the second most populous in terms of absolute population size, of 192, 977 persons. It shares boundaries with Hohoe district on the North, Ghana-Togo border on the west, Kpandu district on the east and on the South by North- Tongu and Akatsi Districts. It has fifty six (56) health facilities out of which forty five percent (45%) are under Ghana Health Service/Ministry of Health. The rest are mission facilities and private owned. The breakdown is as follows- 1 Regional Hospital, 1 Municipal Hospital, 1 Polyclinic, 39 health centers, 3 Reproductive and Child Health/Family Planning Static centers, 1 Quasi hospital, 2 Christian Association Clinics,

5 Private Maternity Home and 3 private clinics. The Ho Regional and Municipal hospitals are the two centres for PMTCT services.

Women constitute 51.8% of the total population and 15,438 within the fertility age group. There are three (3) major ethnic groups in the Municipality, namely the Ewes, the Agortimes and the Avatimes. They are predominantly Christians with a few traditionalists and Muslims.

The main economic activities carried out by the people in the Municipality consist of farming and trading and the minor ones include pottery, wood carving, 'kente' weaving and cattle rearing among others.

The municipal area is also well endowed with educational institutions. Social amenities are also available and communication and road network fairly good. There are few tourist attractions and hospitality industries. They celebrate their YAM Festival yearly in September.

3.3 Variables

Dependent Variables

1. Pregnant women who did HIV test
2. Pregnant women who did not do the HIV test

Independent Variables

1. Socio-demograhic variables
    a. Age

b. Religion

c. Occupation

d. Marital status

e. Education

2. Economic

a. Occupation/employment,

b. Income level.

3. Culture

a. Ethnicity

b. Norms

c. Beliefs

d. Values

e. Spousal consent

f. Parental guidance

4. Social

a. Discrimination

b. Stigmatization

c. Rejection

d. Peer pressure

5. Service Factors

a. Service Providers

b. Geographical Accessibility

c. Financial Accessibility

d. Service Availability

3.4 Study population

A study population is the entire accessible group of persons that is of interest to the researcher or that meets the criteria the researcher is interested in studying (Brink, 2002). The population in this study was pregnant women of childbearing age (15-49 years) and men aged 27-65 years. The target population was pregnant women who use ANC services in two public sector hospitals namely Volta Regional Hospital (VRH) and Ho Municipal Hospital (HMH) including the four ANC centres under the Municipality. The nurse in charge of each hospital assisted the researcher to identify the participants. The total population of Ho Municipality as at 2007 was estimated at 163,542. Children under 12 months were expected to form 4% of the total population and that was estimated at 6,542. Expected pregnancy and delivery in the year under review was expected to be 4% of total population and that also amounted to 6,542. Children under 24 months were expected to form 8% of the total population and that was equivalent to 13,084 and Women in Fertility Age (WIFA) were expected to form 23.3% of the total population giving a figure of 38,105 women (Ho Municipal Directorate Annual Report, 2007).

The inclusion criterion was:

1. Pregnant women aged 15-49 years
2. Attending ANC clinic in two designated public hospitals and four ANC centres in each of the districts of the municipality.

3.5 Limitations of the study

The study was hindered by the small number of the study population. Aside the two PMTCT Centers in Ho Municipality, FGDs were to be held in each of the four districts of

the municipality. Three of the districts were successfully covered leaving one due to heavy downpours each time the journey was scheduled and lack of time. The Questionnaire was administered as structured interview guide as the pregnant women could not fill the forms themselves due to stress after the day's activities and therefore were assisted by the research team. It is hoped that despite the omission the data collected would help achieve the objectives of the study.

3.6 Ethical Consideration

Participation of the subjects conformed to the required ethical guidelines regarding the use of human subjects. The study protocol was vetted by the Proposal Review Board and the Ethical clearance Committee. Permission was sought from the chiefs of Klefe and Abutia-Agorve where the FGDs were held. The midwives in the study area co-operated well with the research team. The aim of the study was explained to all the potential participants. Permission to include them in the study was sought and written consent obtained. The participants were informed that they were free to withdraw at any time without giving reasons. A decision not to participate was strictly respected and the women were assured that non-participation would not affect their healthcare in any way. Strict confidentiality and privacy was ensured and maintained throughout the study.

All information concerning individual subjects remained anonymous and confidential. The use of tape-recorder and note taking were explained to respondents and participants. The research findings were discussed with the District Health Management Team (DHMT). Dissemination of findings was done to all stake holders.

3.7 Sampling Procedure.

Sampling is the process of selecting a portion of the population to represent the entire population; it is then a subset of the population (Denise et al, 2001). Bless et al, (2000) stated that sampling should be done because it is less time consuming and less costly for the researcher to work on a subset of the population. In this study, two hospitals were sampled because their ANC and VCT services were integrated. Other ANC clinics in Ho district provided FGD though they were not having PMTCT centres.

The sampling base was selected from ANC clinics providing VCT and PMTCT which was reported to be fully operational since the introduction of the PMTCT program in 2005. Initially they conducted ANC clinic twice a week but later changed to Focus ANC services which is organized on daily basis. During the first visit, all the ANC patients were provided with ANC records. The ANC service commenced with health education and the introduction of the VCT/PMTCT program counseling. After the group counseling, the counselors continued with those who consented to be tested for HIV.

A convenience sampling method was used to select pregnant women who attended the hospitals. The sample size was selected in a way that was representative to allow for generalization of findings to the population (Denise et al, 2001). Three hundred (310) pregnant women were conveniently sampled to provide information on the study questions. EXIT interview was conducted for both of the pregnant women who consented to HIV testing and those who did not consent to have HIV test on the same day.

3.8 Sample Size Determination

Data from Ho Municipal Health Directorate revealed that out of the 2,568 pregnant women counseled during Antenatal care in 2007 only 28% accepted the testing for HIV. Assuming a margin of error of 5%, with 95% confidence level, the calculated sample size was 276. Ten percent of this figure was added totaling 304 and in all 310 was used.

3.9 Data Collection

A questionnaire was developed to collect information on pregnant women who attended antenatal care during the survey period. The list of essential information needed to meet the survey objectives formed the basis of the survey questionnaire. The design of the standard questionnaire was to ensure that all the respondents were asked the same questions which enabled the survey responses to be tabulated easily. Before the questionnaire was finalized, it was tested for content and length. The pre-testing was also to ensure adequacy and relevance to generating the needed information and to ensure that both interviewers and respondents understood it. In the pre-test, a small number of interviews were conducted and the questionnaire was revised on the basis of the results and comments from the interviewers.

All interviewers were brought to a central location, taught survey procedures and how to collect the data. The questionnaire was administered to pregnant women who went through the antenatal care procedure during an exit interview to elicit the relevant data. Completed interviews were reviewed to ensure that the entire questions have been asked and answers recorded clearly. The data collection was done in four weeks.

3.9.1 Qualitative Sampling procedure

An In-depth interview was performed by the In-Charge PMTCT centre in Ho Municipal Hospital (HMH).Three focus group discussions were conducted with a maximum of 10 participants. Members of the Female focus group were pregnant women attending or not attending ANC clinic. They were all contacted in their various homes and agreed to be the female discussant. The male FGD participants were selected through the same procedure. The discussion started with finding out where the pregnant women in the community access care so as to be healthy and pass through the birth process safely.

3.10 Quality Control

The quality of the data was enhanced by checking the reliability and validity of the data collection instruments used (Questionnaires and interview guides). Each day's work was reviewed and potential problems addressed. Completed questionnaires were checked for completeness and were numbered accurately.

The voice recorders were always checked prior to and after the interviews for efficacy and efficiency. FGD's were compiled after each session to ensure that the complete and the actual information given by the respondents have been captured. Any language barriers or clarity of information was addressed promptly by using the language that the respondents understood.

3.11 Data Processing and Analysis

Data from filled questionnaires were coded and entered into Epi Info version 6 and SPSS version 13 for Windows (CDC, USA). The general information about the respondents was first presented to understand their background characteristics. Knowledge of pregnant women about preventing HIV transmission was

derived from the three traditional methods of *"Abstinence", "Be Faithful",* and *"Condom use"*. The percentage of pregnant women who knew that HIV transmission could be prevented by all three methods was determined using simple proportions.

Similarly, the proportion of HIV counseling and testing during antenatal care was determined using the number of pregnant women aged 15-49 years attending antenatal clinic that received counseling, were tested and received results as a proportion of the total number of pregnant women interviewed at the antenatal clinic to determine the percentage of pregnant women who know that HIV can be transmitted by all the three modes namely *"During pregnancy", "At delivery",* and *"Through breast milk"*.

CHAPTER FOUR

4.0 RESULTS

The focus of this chapter is the result of the study. This is presented in sections made up of the socio-demographic characteristics of the respondents; knowledge of HIV and testing; perceptions about HIV testing and decision to test. At the bivariate analysis, Pearson Chi-square was used to access the association between the independent variables (the socio-demographic characteristics of respondents) and the dependent variable (accepted and tested for HIV). The result is supported with findings from the qualitative study (Focus Group Discussion) in the form of prose depicting the themes explored in the study.

4.1 Background characteristics of the Respondents

Exit interview of 310 pregnant women in their reproductive age (15-49 years) attending ANC at Ho Municipal and Volta Regional Hospitals were conducted. Both health facilities are Government owned in the Volta Region of Ghana. The socio-demographic characteristics of the respondents are presented in Table 4.1. The age distribution of the respondents indicated a normal distribution with the same mean, median and modal age (28 years old). Most of them (29.4%) were in the 25-29 year groups, teenagers of 15-19 years formed 8.4%. In all 89.4% of the 20-39 age groups who were in the reproductive age formed the major Respondents with the least (0.6%) constituted 45-49 year group.

Concerning the marital status of the respondents, majority (87.4%) were married, 6.8% were cohabiting with the remaining 5.8% still single.

Approximately 94.2% of the respondents had at least primary education with only 5.8% having no formal education, 50% had completed only Junior High School/Middle School with 34.5% having secondary or higher education.

The religious affiliation of the respondents indicated that majority (97.4%) were Christians. This is followed by Muslims (2.3%) and Traditionalist constituting the least (0.3%). Employment status of the respondents indicated that 82.9% of the respondents were employed with the remaining 17.1% currently not employed. The occupations of the respondents were dominated by trading (41.3%). This was followed by artisans (21.6%), farmers (11.0%) and public servants (9.0%). Majority (91.3%) of the respondents were Ewes with 6.1% and 2.6% belonging to the Akan and Hausa ethnic groups respectively. Geographically, more than half (57.1%) of the respondents were residing in urban areas with the remaining 43.9% residing in rural areas.

Table 4.1 Socio-demographic characteristics of the respondents

Characteristics	Frequency	Percent (%)
Age group		
15-19	26	8.4
20-24	73	23.5
25-29	91	29.4
30-34	66	21.3
35-39	47	15.2
40-44	5	1.6
45-49	2	0.6
TOTAL	310	100
Marital Status		
Single	18	5.8
Married	271	87.4
Cohabiting	21	6.8
TOTAL	310	100
Highest Educational attainment		
None	18	5.8
Primary	30	9.7
JHS/MSLC	155	50.0
Secondary/Vocational	79	25.5
Tertiary	28	9.0
TOTAL	310	100
Religion		
Christian	302	97.4
Moslem	7	2.3
Traditionalist	1	0.3
TOTAL	310	310
Occupation		
Trader	128	41.3
Artisan	67	21.6
Farmer	34	11.0
Public Servant	28	9.0
Unemployed	53	17.1
TOTAL	310	100
Ethnicity		
Ewes	283	91.3
Akans	19	6.1
Hausa	8	2.6
TOTAL	310	100
Residence		
Urban	177	57.1
Rural	133	43.9

Total	**310**	**100.0**

Source: Field work, 2008

4.2 Background of the Focus Group Discussion Participants

Male participants numbering ten in the Focus Group Discussion (FGD) were aged between 27 to 65 years with majority of them currently married. All respondents have completed at least basic level education. There were two separate female groups consisted of ten participants in each group. Their ages ranged from 19 to 40 years. All of them had attained some level of education and most of them were married.

4.3 Knowledge about HIV/AIDS

Knowledge of HIV/AIDS was universal among the respondents. The data indicated that 99% of the respondents had ever heard about HVI/AIDS. Only one percent of the respondents have not heard about HVI/AIDS. This was confirmed in the FGD for both males and females groups. The knowledge explored were causes, mode of transmission prevention and nature of the disease. Information gathered from respondents on HIV/AIDS and testing is presented in Table 4.2 below

Table: 4. 2 Knowledge about HIV/AIDS

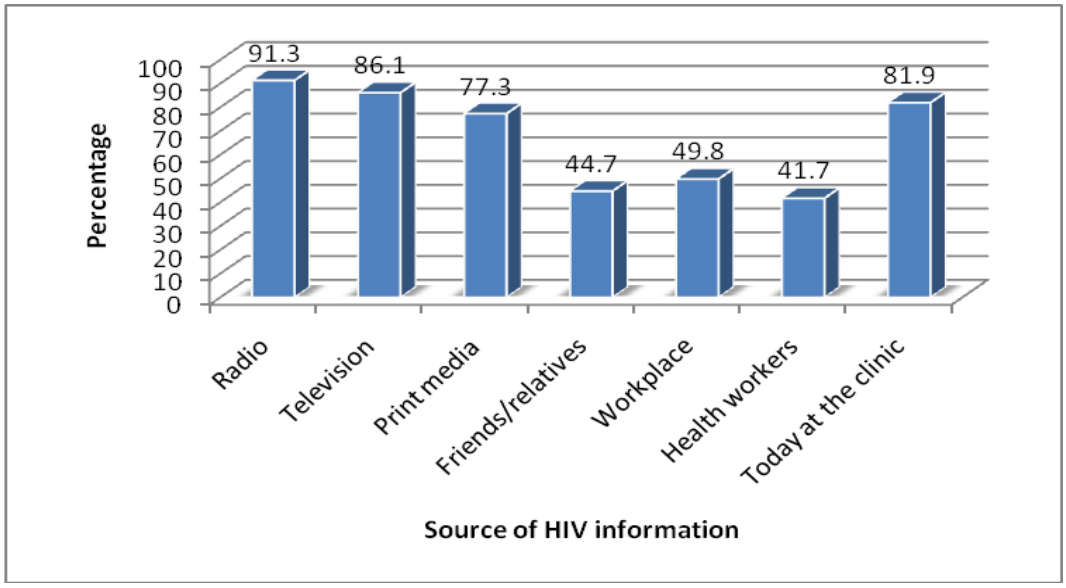
Responses	Frequency (No)	Percentage (%)
Yes	307	99.0
No	3	1.0
Total	310	100.0

Source: Field work, 2008

4.3.1 Sources of information on HIV/AIDS

Figure 1 presents the source of information on HIV/AIDS among the pregnant women. Majority of respondents mentioned Radio (91.3%), Television (86.1%), Health talk that day at the ANC centre (81.9%) and Print media (77.3%) as their sources of information on HIV/AIDS. Prior to visit to the ANC that day information from Health workers attracted 41.7%. This constituted the least source of information.

Figure: 4.1 Percentage distributions of pregnant women by source of HIV Information



Source: Field work, 2008 Note: This is a multiple response variable

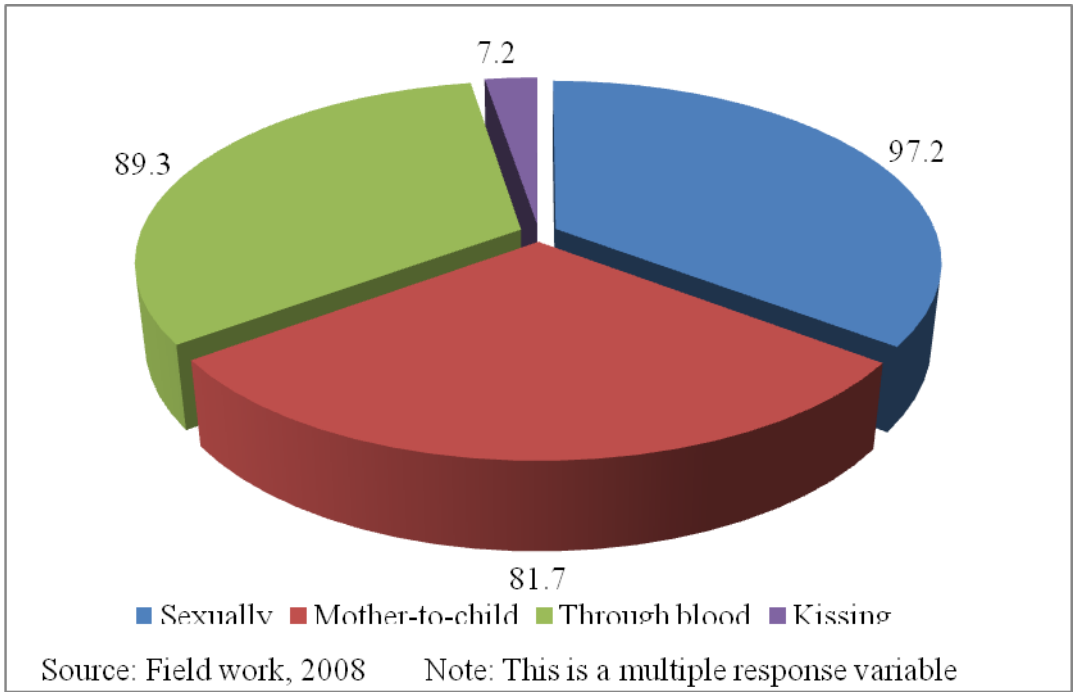
4.3.2 Knowledge on Mode of Transmission of HIV/AIDS

Knowledge of pregnant women about how an individual gets infected with the HIV virus presented in Figure 4.2 indicates that some of the pregnant women knew more than one

mode of infection. Approximately 97% mentioned sexually followed by blood (89.3%), mother-to-child (81.7%) with 7.2% mentioning kissing as means of infection of HIV virus. The knowledge of the mode of transmission empowered a woman to counsel her colleagues during a FGD. Below is the extraction:

> *"The man (HIV positive) might go to another person if you leave him and might give it to that partner as well. It will be better if you persuade him and give him your maximum support while he goes through the treatment" (female aged 40 years).*

Figure 4.2 Percentage distributions of pregnant women by knowledge of HIV infection



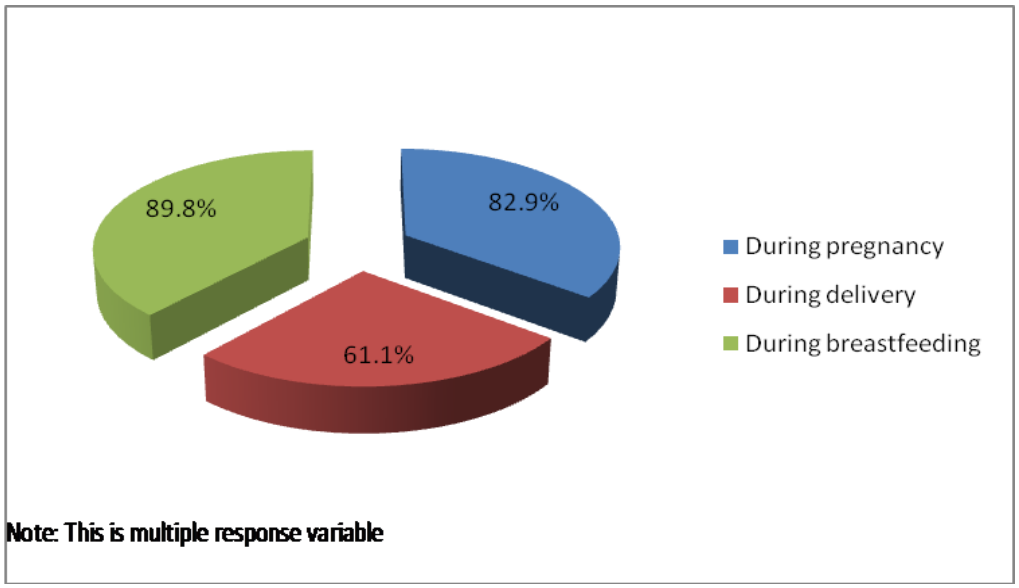
Source: Field work, 2008 Note: This is a multiple response variable

4.3.3 Ways of transmitting HIV from Mother-to-child

The distributions of respondents by knowledge of mother-to-child transmission of HIV virus is presented in Figure 4.3 it revealed that 82.9% of the pregnant women knew of transmission during pregnancy, 61.1% during delivery and 89.8% during breastfeeding.

In all, the data showed in Table 4.3a indicates that 48.4% (150) knew of all the three modes of MTCT of HIV/AIDS which were during pregnancy, during delivery and during breastfeeding whilst 11.3% were not aware of any of the three modes of MTCT of HIV.

Figure 4.3 Percentage distributions of pregnant women by knowledge of mode of mother-to-child transmission of HIV virus



Source: Field work, 2008

Table 4.3a Percentage distribution of pregnant women by knowledge of mode of mother to child transmission of HIV

Knowledge of MTCT	All three modes		None of the three modes	
	N	(%)	N	(%)
No	160	51.6	275	88.7
Yes	150	48.4	35	11.3
Total	310	100.0	310	100.0

The distribution of pregnant women by knowledge of mother-to-child transmission of HIV virus by place of residence is presented in Table 4.3b. Among pregnant women residing in urban areas, 79.1% knew of transmission of HIV virus from mother-to-child during pregnancy, 59.3% during delivery and 83.6% during breastfeeding. For the rural pregnant women, 66.2% knew HIV virus can be transmitted from mother-to-child during pregnancy, 47.4% during delivery and 74.4% during breastfeeding. In both geographical areas, knowledge of transmission of HIV virus from mother-to-child during breastfeeding attracted the highest response (83.6%-urban, 74.4%-rural); pregnancy (79.1%-urban, 66.2%-rural) and delivery was low (59.3%-urban and 47.4%-rural).

Table 4.3b Percentage distribution of pregnant women by place of residence and knowledge of mode of mother to child transmission of HIV

Mode of transmission	Place of residence	
	Urban (%)	Rural (%)
During pregnancy	79.1	66.2
During delivery	59.3	47.4
During breastfeeding	83.6	74.4

Source: Field work, 2008 Note: This is a multiple response variable

4.3.4 Ways to protect oneself against HIV/AIDS

As to how to protect one from acquiring HIV/AIDS, Figure 4.4 revealed that 89.6% of the pregnant women interviewed confirmed that when one is faithful to the sexual partner, one can be protected, 77.5% mentioned the use of condoms and 86.4% believed abstinence as a way of protecting oneself from acquiring HIV/AIDS.

Both male and female groups during the FGDs supported the use of condoms in HIV prevention. This indicates that there is relatively significant level of knowledge of means of protecting one self from infection of the HIV virus. However, in the FGD, some of the

men insisted that" *Condom egbaa!! Condom egbaa!!*" which in the Ewe language means "condom bursts" therefore should not be relied upon. To support the protection Respondent 6 also in the male FGD had this to say:

> "*When you realize a friend who is having the virus has been wounded and you need to help him, you can use rubber as a protective material before you handle the blood of the infected person. This will prevent you from getting the disease" (male aged27)*

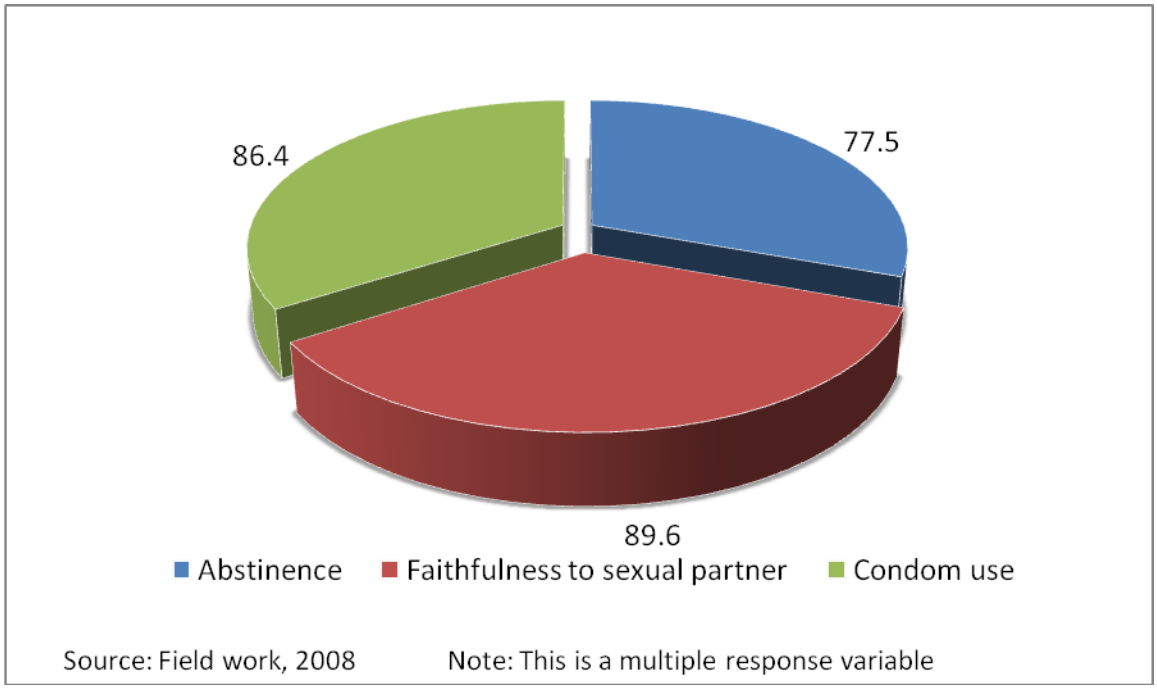
> *"If you sack your wife, people might get to know that your wife had HIV that is why you sent her away. When you take a second wife, there is the need to think of how not to infect the second woman" (male aged 27 years).*

> *"I need to advise him (my HIV positive husband) if I really love him, however we must use condom whenever we want to have sex. (Female aged 30)*

One of them also deemed it wise to share this experience with others as a motivation to accommodate HIV positive spouses/family;

> '*I experienced it sometime ago. There was this army officer who had the virus when he went for peace keeping outside the country. When he came back and realized he had the virus, he disclosed it to the wife and gave her a cheque that she could go and marry another man if she liked. Since then he never had sex with the woman. T he woman did not remarry but remained and took care of the man till he died. When a man gets the sickness he will do everything possible to ensure that the woman takes care of the children' (male aged 34).*

Figure 4.4 Percentage distributions of pregnant women by knowledge of protection against HIV



4.4 Perception of HIV Testing

This section of the chapter assessed pregnant women's perception about HIV/AIDS. The participants perceived both benefits and threats. The perceptions assessed included the benefit of testing for HIV to the individual, to the pregnant woman, and fears of getting tested for HIV.

Figure 4.5 presents distributions of pregnant women by their perceptions about the benefit of HIV testing. In all, 94.1% of the pregnant women mentioned treatment for the

disease condition as benefit one derives when test for HIV, knowing one's sero-status (89.5%), care (64.1%) and the least mentioned was support (61.7%).

The perceived threats towards HIV testing presented in Figure 4.6 revealed that the fear of death (86.8%) was the most common threat among the pregnant women followed by stigmatization (77.2%), discrimination (67.1%), with husband's anger (51.8%) constituting the least. This anger, ignorance and fear of death were exhibited during FGD for both males and females. Below is extract of the discussions with the FGD participants.

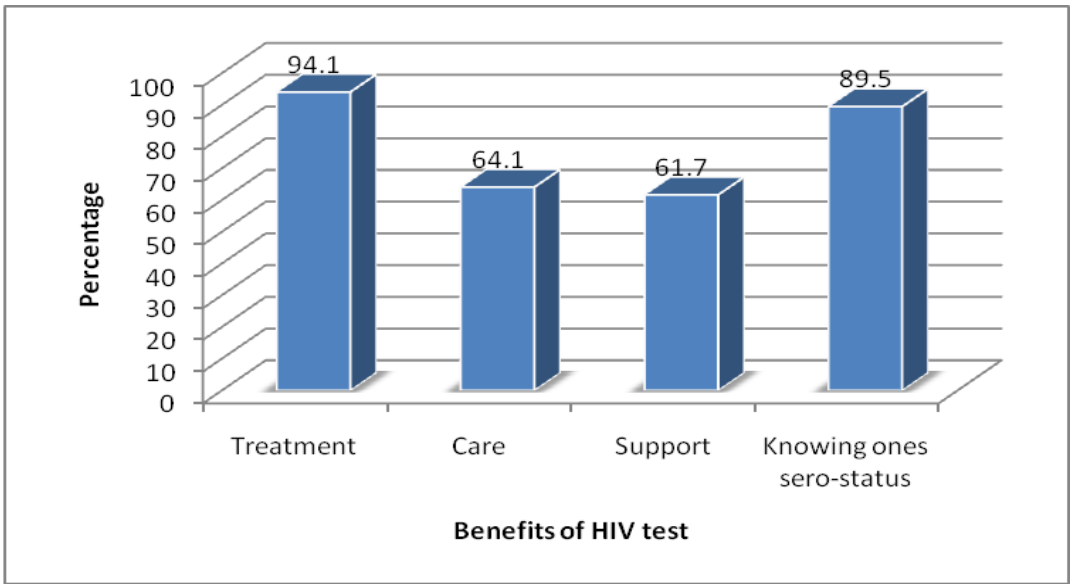
> "*I don't have money to pay rent at two places; hence the best solution is that she must go to the parents if she (my wife) tests positive to the HIV virus. I can't take care of her again (male aged 28 years)".*

> *"When I realized that my children are old enough and are independent now but my wife is infected I can call my children to inform them of what has happened. I have not divorced her but I still want to marry another woman because I cannot stay without sex" (male aged 47years).*

> "*If my husband has it (HIV), I will inform him that I am going to my mother and when I deliver, I will not go back to him."(Female aged 20years)*

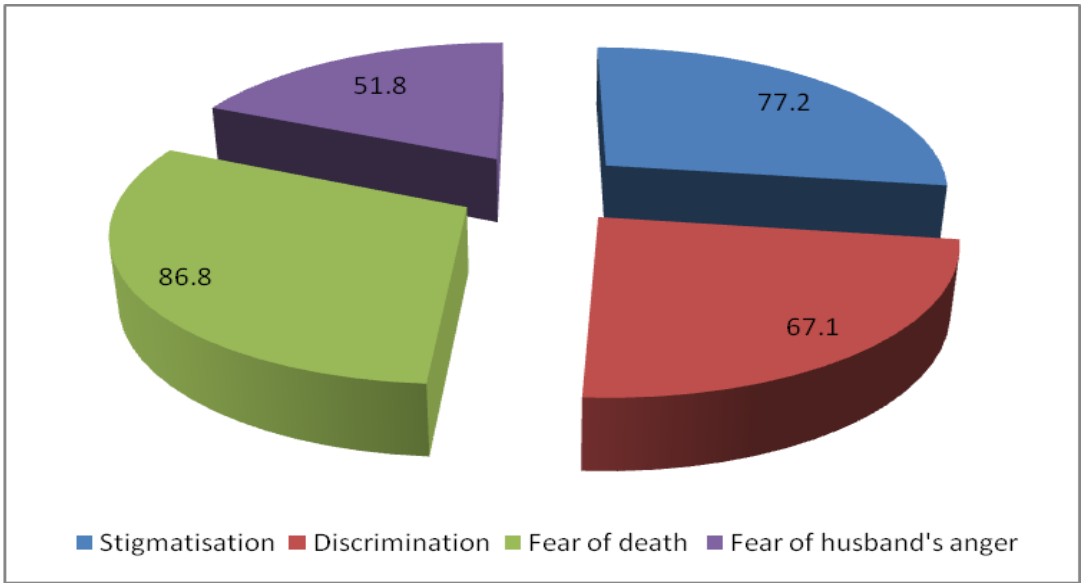
Sister Pamela, the In-charge PMTCT unit HMH corroborated the fact that due to fear of divorce ,partner disclosure of HIV/AIDS positivity is a problem thereby lowering uptake of testing for HIV/AIDS. However, the availability of treatment encourages them to come.

Figure 4.5 Percentage distributions of pregnant women by perceived benefits of HIV testing



Source: Field work, 2008 Note: This is a multiple response variable

Figure 4.6 Percentage distributions of pregnant women by perceived fears of HIV testing



Source: Field work, 2008 Note: This is a multiple response variable

4.5 Decision to Test

The focus of this section is to examine the factors that determined and influenced the pregnant women's decision to accept and test for HIV. Their knowledge about HIV/AIDS and socio-demographic characteristics of the pregnant women were analyzed against acceptance and testing for HIV.

4 5.1 Knowledge and HIV Testing

Knowledge of a disease condition affects and influences individual and group attitude toward a disease. In the Ho study knowledge about HIV/AIDS was universal among the respondents but did not positively reflect in their testing for HIV. Table 4.4 presents the percentage distribution of respondents by their knowledge and the test for HIV/AIDS. Less than half of the respondents had tested for HIV. All the134 (43.2%) respondents

who got tested for HIV had heard about HIV. Approximately 56.8% of the respondents did not do the HIV test. However, approximately 1% of the respondents who had not been tested for HIV had not heard about HIV. This showed that universal knowledge of respondents about HIV testing among pregnant women did not commensurate knowledge.

Table 4.4 Percentage distribution of pregnant women by knowledge of HIV and test for HIV

Knowledge of HIV	Test for HIV				Total	
	Yes		No			
	N	(%)	N	(%)	N	(%)
Yes	134	(43.2)	173	(55.8)	307	(99.0)
No	0	(0.0)	3	(1.0)	3	(1.0)
Total	134	(43.2)	176	(56.8)	310	(100.0)

Source: Field work, 2008

Geographical distribution of pregnant women and tested status of HIV was presented in Table 4.5. The distribution indicated that among the pregnant women who accepted and had been tested for HIV, 61.9% were in urban areas. Again majority (53.4%) of the pregnant women who had not been tested for HIV were residing in urban areas with the

rest 46.6% residing in rural areas. There was no statistical significant difference between place of residence and HIV tested status.

Table 4.5 Percentage distributions of pregnant women by place of residence who tested for HIV.

Place of residence	Tested for HIV			
	Yes	(%)	No	(%)
Urban	83	(61.9)	94	(53.4%)
Rural	51	(38.1)	82	(46.6%)
Total	134	(100)	176	(100%)

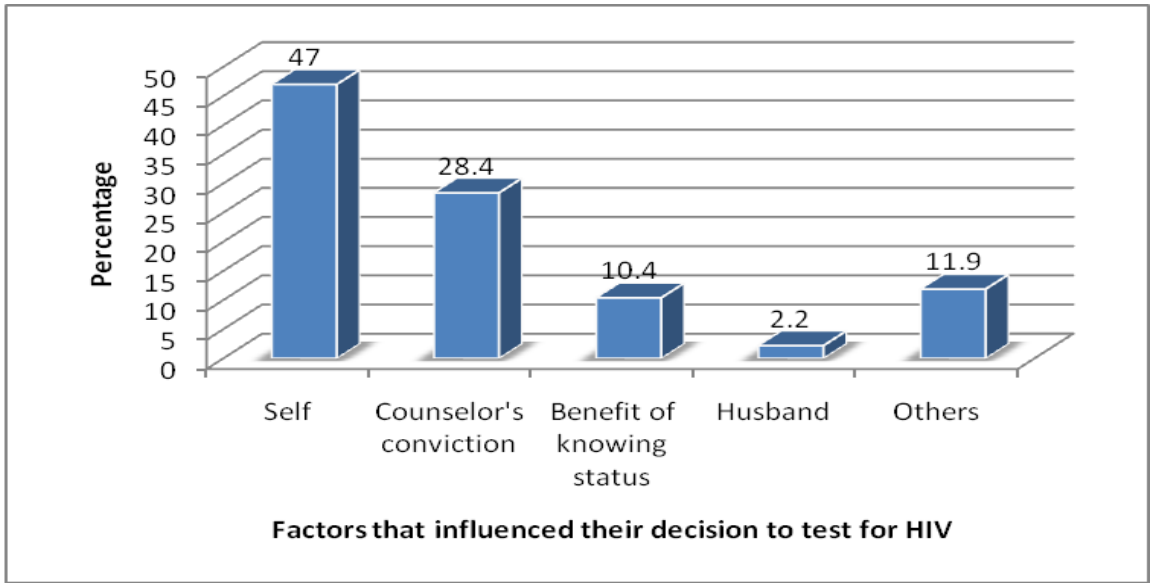
Source: Field work, 2008

4.5.2 Factors influencing decision to test for HIV

Given the perceived benefits and threats of testing for HIV, there are varying factors that influence the individual to opt for HIV testing. This section examines the factors the influenced pregnant women to opt to test for HIV. This study revealed that knowledge of HIV/AIDS was universal among the respondents but less than half of the respondents have tested for HIV. The distribution of the pregnant women who accepted and tested for HIV by the factor that influenced their decision to get tested is presented in Figure 4.7. Of those who had not tested, (91.1%) said they planned to test. Some of the reasons given for not testing were that they had not yet decided, some claimed they did not have the virus and others said they will not state the decision to decline. The data revealed that 43.6% of the pregnant women got tested for HIV through self motivation. This was followed by counselor's conviction (28.4%), benefit of knowing one's status (10.4%). Husband's influence accounted for 2.2% of the pregnant women's decision to get tested

for HIV. Among the pregnant women who had been tested for HIV, 11.9% got tested for HIV because it was part of routine antenatal service package.

Figure 4.7 Percentage distribution of pregnant women who tested for HIV by factor that influenced their decision to test.



Source: Field work, 2008

Almost all of the respondents (98.27%) were of the opinion that the Counseling and Testing should continue to be part of the Antenatal services. Only one person objected to

the integration of HIV testing in ANC settings. She mentioned fear surrounding the test as her deterrent. In the FGD the males unanimously said they will send their wives back to the clinic for the test if they object to it because the Midwives' know what is good for them but interestingly the women in the FGD had all agreed to do the test.

Furthermore, 94.5% of the total respondents were of the opinion that spousal involvement should be an integral part of the ANC services whilst 5.5% disagreed that the spousal involvement should be part of the ANC services. Those who disagreed mentioned mistrust of husbands as the men may contract the disease outside.

As to whether respondents will recommend the VCT services to their neighbours and relatives, 92.73% agreed with the reason that they may need their help in sickness or during playtime with children. Again they share knives and cutlasses on household basis.

4.5.3 Socio-demographic determinants of acceptance and HIV testing

The socio-demographic characteristics influence individual decision to accept and test for HIV. In Table 4.6, the data revealed that among the pregnant women, who accepted and tested for HIV, 83.3% aged 20-39 years who are deemed as the most reproductive age groups, 20-25year groups constituted the highest respondents with 37.3% and the least 0.7% (40-44 and 45-49 years respectively). Among the pregnant women who did not accept and tested for HIV 20-39 age groups were in majority and the 40 year groups in minority. Among tested respondents, majority (88.8%) were currently married. In the case of the respondents who have not tested for HIV, 86.4% were currently married. Only

5.2% of the respondents who have accepted and tested for HIV were single compared to 6.3% among the respondents who have not tested for HIV.

Educationally, only 2.2% of the pregnant women who accepted and tested for HIV had no formal education. The rest (97.7%) had at least primary education with majority having JHS/MSLC or higher. Comparatively, among the pregnant women who did not accept and get tested for HIV, 8.5% had no formal education with the remaining (91.5%) had at least primary education. Almost all the pregnant women who accepted and tested for HIV were Christians with the remaining 5.2% belonging to the Muslim religion. The only pregnant women who belonged to the Traditional religion (0.6%) did not test for the HIV.

Only 13.4% of the pregnant women who accepted and tested for HIV were unemployed compared with 19.9% among those who have not accepted and tested for HIV. Ewes constituted 86.6% of the pregnant women who accepted and tested for HIV. Akans and Hausas constituted 9.0% and 3.7% respectively of the pregnant women who accepted and tested for HIV. Among the pregnant women who have not accepted and tested for HIV, almost all were Ewes except 4.0% and 1.1% who were Akans and Hausas respectively.

The analysis of the place of residence and acceptance status indicated hat among the pregnant women who have accepted and tested for HIV, 61.9% were urban dwellers with 38.1% rural dwellers. Pregnant women who have not accepted and tested for HIV, more than half (53.4%) were residing in urban areas with the remaining 46.6% residing in rural areas.

Though the women did not complain about distance as a deterrent to testing for HIV the men complained bitterly and made passionate appeal for consideration of their remote and deprived areas. Below is an extract of the discussions:

> "*Where pregnant women have to travel several miles to the clinic (over 9 miles) it becomes difficult to get to the hospital so they resort to the spiritualists/herbalists. Sometimes it takes over 3 hours before they get vehicle to go to the hospital/clinic. They feel it is waste of time going to the clinic hence they resort to the herbalists. Few of the places that suffer these problems include Abutia kpota, Wukpo, etc. Most of these communities are inaccessible. You cannot even use bicycles to get to these communities. It will be prudent to set up clinics in these communities or regularly send health care providers to render services there. If this is done it will reduce the rate at which people from these communities visit the herbalists/spiritualists. This will also help prevent home delivery with its associated deaths due to the delays in reaching the Midwife in critical times" (male aged 31, a trader).*

Below in Table 4.6 at alpha level of 0.05, age, highest level of education attained, religion and occupation were statistically significant predictors that influenced acceptance and testing for HIV. This indicates that marital status, ethnicity, and place of residence were not statistically significant predictors or factors that influenced pregnant women who accepted and tested for HIV.

Table 4.6 Percentage distribution of pregnant women by socio-demographic characteristics and acceptance for HIV test status

Socio-demographic characteristic	Acceptance status		P-value	Total
	Yes	No		
Age group			0.045*	
15-19	5.2	10.8		8.4
20-24	17.9	27.8		23.5
25-29	37.3	23.3		29.4
30-34	20.9	21.6		21.3
35-39	17.2	13.6		15.2
40-44	0.7	2.3		1.6
45-49	0.7	0.6		0.6
Marital status			0.813	
Single	5.2	6.3		5.8
Married	88.8	86.4		87.4
Cohabit	6.0	7.4		6.8
Education			0.011*	
No formal education	2.2	8.5		5.8
Primary	9.0	10.2		9.7
JHS/MSLC	47.0	52.3		50.0
SHS	24.6	22.7		23.5
Vocational	3.7	0.6		1.9
Tertiary	13.4	5.7		9.0
Religion			0.006*	
Christian	94.8	99.4		97.4

Muslim	5.2	0.0		2.3
Traditional	0.0	0.6		0.3
Occupation			0.047*	
Civil/public	11.9	6.8		9.0
Trader	47.8	36.4		41.3
Farmer	7.5	13.6		11.0
Artisan	19.4	23.3		21.6
Unemployed	13.4	19.9		17.1
Ethnicity			0.065	
Akan	9.0	4.0		6.1
Ewe	86.6	94.9		91.3
Hausa	3.7	1.1		2.3
Place of residence			0.133	
Urban	61.9	53.4		57.1
Rural	38.1	46.6		42.9
Total	134	176		100.0

Source: Field work, 2008 * Significant at $p<0.05$

4.5.4 Intermediate factors that influence decision of acceptance and HIV testing.

Decision to accept and test for HIV may be influenced by the individual socio-demographic characteristics. However, there are other intervening factors that also impact on the individual's decision to accept and test for HIV. These factors are not mutually exclusive but work together with the socio-demographic characteristics to influence the individual's decision to accept and test for HIV.

The intermediate factors considered under this study were the acceptance of the continuity of VCT as part of ANC service and the recommendation of VCT service to neighbours and relatives.

The data revealed that majority (91.6%) of the pregnant women agreed and accepted VCT services to be part of ANC services. Only 1.6% of the pregnant women were not in agreement with VCT services being part of ANC services, with 6.8% not giving any

response. In all, 86.5% of the pregnant women interviewed indicated they would recommend VCT service to neighbours and relatives. Relatively, 7.7% of the pregnant women interviewed indicated they would not recommend VCT to neighbours and relatives. However, 6.8% did not give any response.

Table 4.7 below further showed that among the pregnant women who have accepted and tested for HIV, 96.3% compared with 88.1% of those who have not accepted and tested for HIV agreed for VCT services to be part of ANC services. In the same way, 1.5% of pregnant women who have accepted and tested for HIV compared with 1.7% of pregnant women who have not accepted and tested for HIV did not agree for the continuity of VCT services to be part of ANC services.

Again in the table, majority (91.8%) of the pregnant women, who have accepted and tested for HIV did indicate that they would recommend VCT services to neighbours and relatives. Only 5.2% of respondents in this category indicated they would not recommend VCT to neighbours and relatives. Among the pregnant women who have not accepted and tested for HIV, 82.4% indicated they would recommend VCT to neighbours and relatives.

The data therefore shows a trend that indicates that pregnant women who have accepted and tested for HIV have a relatively positive attitude toward VCT services as part of ANC services and would recommend it to others. There is also statistically significant association between acceptance and testing for HIV and attitude towards VCT services.

Table 4.7 Percentage distributions of respondents by acceptance and tested status and intermediate factors

Intermediate factors	Acceptance and tested status	
	Yes (%)	**No (%)**
VCT be part f ANC service		
Yes	129 (96.3%)	155 (88.1)
No	02 (1.5%)	03 (1.7%)
Non-response	03 (2.2%)	18 (10.2%)
Recommend VCT to neighbours and relatives		
Yes	123 (91.8%)	145 (82.4%)
No	07 (5.2%)	14 (8.0%)
Non-response	04 (3.0%)	17 (9.7%)

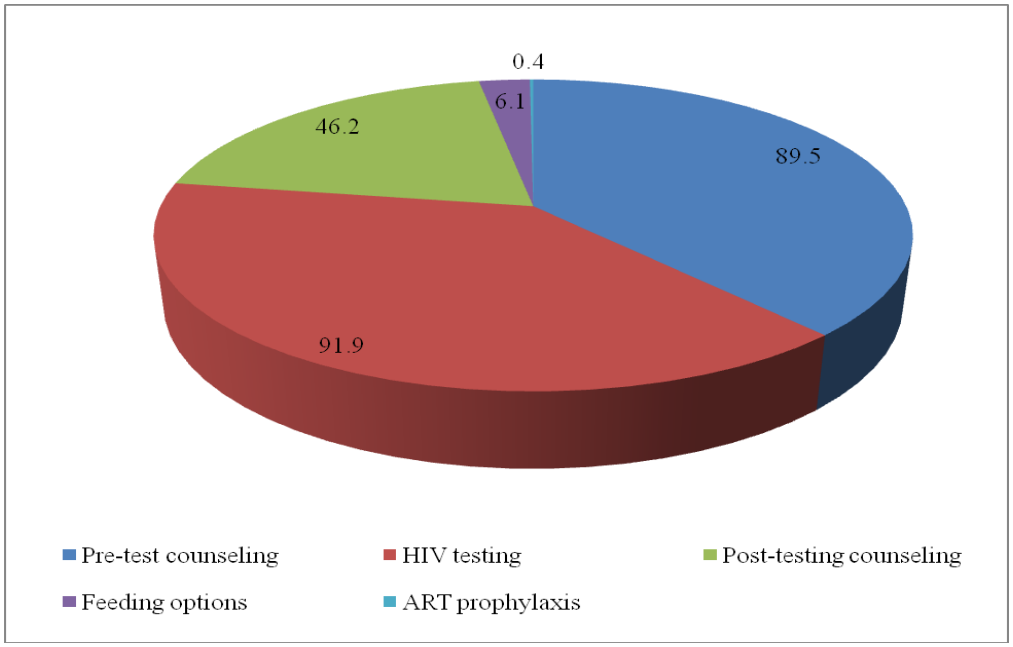
Source: Field work, 2008

4.5.5 VCT and HIV services available at this Ante-natal clinic (ANC)

Figure 4.8 below indicates that 91.9% of the pregnant women interviewed at the antenatal clinics were aware of the existence of HIV Testing services whilst 89.5% knew of Pre-testing counseling services for HIV only, 46.2% knew of post-test counseling services and 6.1% mentioned feeding option services as part of the VCT services at the clinic. It was only one (1) respondent representing 0.4% of the respondents who mentioned ART/Prophylaxis services at the Antenatal clinic. This single respondent was from a rural setting. Almost all of them (96.9%) said one could get tested through counseling and testing whilst the rest, (3.1%) said they didn't know how to get tested. Through the FGD

it was realized that there were no PMTCT services in any of the sub-districts of Ho except two of the Midwives who were trained.

Figure 4.8 VCT and HIV service available at the ANC



Source: Field work, 2008

4.5.6 Decision to 'Opt In' and 'Opt out.'

When given the option to 'opt in' or 'opt out' for the HIV test, all the respondents (91.9%) except one said they will prefer to 'opt in' for the service. The reasons given were that it will enable them to know their sero-status and receive treatment early as stated by those who did the test already. The following responses were additionally extracted from both qualitative and quantitative studies.

- 'For my safety and that of my unborn child including the family'
- 'Because they will talk about me that I have the disease that is why I refuse to test'

- 'To be educated on what you do not know'
- 'To prevent spread of the disease'
- 'To obey the Nurses because they know what is good for us'.
- 'I moved with three men'
- 'I cannot trust my husband because I do not live with my husband and that he likes women'.

Those who will not opt in gave the following reactions:

- 'I have done it already so there is no need doing it again'
- 'I cannot tell you'
- 'If money will be given for testing for HIV then I can do it'.
- 'I do not feel like doing it'
- 'I do not have the HIV'

The above revelations were corroborated by Sister Pamela of PMTCT, HMH when she mentioned that even those who test positive default treatment because of denial of the presence of the disease.

CHAPTER FIVE

5.0 DISCUSSIONS

5.1 Knowledge about HIV transmission.

Counseling and Testing is one of nationwide policies for HIV/AIDS prevention and control. In this study almost all the respondents were very knowledgeable about HIV/AIDS. This confirms a previous study in the country that awareness of HIV/ AIDS in Ghana is universal (GSS, NMIMR, ORC Macro, 2004).Adeneye et al, (2006) corroborated the high knowledge in his study in Ogun State in Nigeria.

On the issue of MTCT of HIV, less than half of the women respondents (48.4%) in the Ho study knew of all the three modes of the transmission which are during pregnancy (in utero), in labour and during breast feeding. However 11.3% were not aware of any mode of the MTCT of HIV/AIDS. Kayode et al, (2000) also asserted that many studies have shown that knowledge about MTCT of HIV including prevalence, points of transmission during pregnancy, delivery and breastfeeding is lacking. Ekanem et al, (2004) also revealed that in Lagos, Nigeria 9.9% of the women had good knowledge of the mode of HIV transmission but specific aspects such as during breastfeeding, delivery and others was poor. According to Banjunirwe and Muzoora, (2005), in a study in rural and urban Uganda among 404 pregnant women attending antenatal clinics, the overall knowledge regarding PMTCT was high; 80% knew that a mother with HIV can pass the virus to the child, 12% did not believe it was possible and 8% did not know about the mode of transmission. The study contradicts a previous survey in Komfo Anokye Hospital by Addo, (2005) that knowledge of MTCT of HIV was relatively low. Adeneye et al, (2006) corroborated that in Ogun State in Nigeria, approximately 90% of the women had heard of HIV/AIDS but only 27% knew that HIV could be transmitted from mother-to-child. A

PMTCT study in Tanzania also reported that pregnant women's general knowledge of HIV was high, but specific knowledge of mother to child transmission (MTCT) was relatively low (Kominami, 2007).

Radio, TV programs and print media were the major sources of HIV information. Though these audio visual programmes are normally run by health workers the respondents were unaware and health workers education scored only 4l%. Nevertheless health workers need to persevere in what they do because behavioral changes need continuous education and a lot of interaction. However the daily routine health talk given at the ANC clinic had an average score of 81.9%. This is laudable as clients will always remember the discussions that transpired between them and the Midwives. The missing gap of 18.1% might be that some of the clients came late after the education was over. The pregnant women must be encouraged to come to Clinic early to acquire and share knowledge together with others as well as seek explanations to questions bothering their minds. However observation revealed that the mass awareness creation at the O.P.D at times was not done regularly. This needs to be addressed so that every Midwife sees Health Education as a priority. The findings supported Addo's (2005) observation that his respondents in a study on pregnant women in Kumasi might have seen patients suffering from AIDS or seen such message on TV or in the news papers with universal source of HIV information through radio, TV, newspapers, friends and churches. An example was when Honorable Captain Nfojoh retired, a Member of Parliament (MP) for Ho central among other MPs featured on TV3 HIV campaign programme (2008) dubbed 'Barrel of Hope' where they talked about continuous HIV education and appealed for eradication of HIV stigma and a plan for HIV float on 25th October 2008. The FGD for both the male

and the pregnant women also supported the source of information as from radio. These sources were the strength for the Municipality otherwise they would not have had in-depth knowledge about the HIV programme as the services including the service providers are limited to Ho Municipality.

5.2. Perception about HIV Testing

The perceptions assessed include benefits and threats of testing for HIV. In all, 94.1% of the pregnant women mentioned treatment,knowing one's sero-status (89.5%), care (64.1%) and support (61.7%). The perceived threats mentioned were fear of death (86.8%), stigmatization (77.2%), discrimination (67.1%) and husband's anger (51.8%) constitute the least. In the FGD pregnant women perceived themselves susceptible to HIV infection due to the following responses they gave in the FGD held by the researcher

5.2.1 Fear

Fear of learning one's status and disclosure of a possible HIV positive status to husbands/partners but the respondents were willing to do the test if it becomes routine at the clinic. Some of the responses they gave include:

[1] They cannot trust their husbands,

[2] May be he is infected,

[3] They have moved with three men,

[4] They are no more with their previous husbands.

Among study participants in Tanzania, 54% who did not go back for their test results stated fear as the biggest factor (Mugusi et al, 2002). A routine screening for HIV

infection in booked antenatal women at the Obstetrics Department of the University of Nigeria Teaching Hospital in Enugu showed that 39% of some 600 pregnant women seen, failed to have routine HIV screening even when they had consented to it (Ibekwe et al, 2001). Fear is often sited as one of the reasons for VCT uptake. Cartoux et al, (1998) revealed personal risk as a main motivator for testing while Ottolenghi, (2002) also found some women with the same perceived risk. The following paragraphs explain their perceptions.

5.2.2 Stigma

Breastfeeding is done openly and in line with cultural practices in Ghana, and supported by exclusive breastfeeding policy of the MOH such that it is not surprising that the pregnant women in the Ho study declined to do the HIV test due to the stigma that will go with non breastfeeding coupled with husband's threat of divorce though the men support the test. Again a woman who abruptly weans her child to avoid MTCT through breastfeeding fears having to justify the deviation in customary practice of breastfeeding her child to relatives and others. There are few studies that are particularly related to disclosure of HIV/AIDS status to sexual partner's fears of VCT attendance due to stigma and discrimination (Maman et al, 2001). Nyblade et al, (2002) corroborated that fear of disclosure of HIV status to family and community including fear of the stigma attached to being HIV positive are well known factors in low uptake of VCT. AIDS stigma exists around the world in a variety of ways including ostracism, rejection, discrimination and avoidance of HIV infected people (UNAIDS, 2006). Khan, (2000), added his voice that stigma is also driven by some cultural or religious norms and values as well as fear of

AIDS and secrecy. However, fear of potential discrimination has been found to be greater than actual discrimination in several settings. The behaviors associated with PMTCT have themselves become "markers" that make it difficult to maintain an environment of privacy and confidentiality regarding an HIV positive diagnosis. A pregnant woman whose family sees her taking ARV medications may have no choice but to reveal her HIV status. Drah, (2002 and 2003) in his qualitative and quantitative studies found that community stigma attached to HIV infected persons affected compliance with all aspects of the PMTCT programs and confidentiality. This reflects in stigmatisation of mothers who are not breastfeeding. Corroborating, stigmatization and difficulty in disclosing HIV status prevented some women from using the services (Teeraratkul et al, 2005; Maman et al, 2001; Nyblade et al, 2002) such that in Nairobi Kenya more than a decade ago, 63.7% of respondents stated that if they were found HIV seropositive they would seek a termination of pregnancy (Marjan, 1996). African women were also found to have negative attitude towards medication during pregnancy, bottle-feeding, and caesarean section (Giaquinto et al, 2002).

5.3. Factors that influence decision to test for HIV

Testing for HIV has been found to be a major decision as it comes along with mixed feelings such as being regarded as promiscuous and living with a deadly disease which deserves divorce and abandonment alongside benefits such as treatment and care in case one tests positive. This reflects in the Ho study such that more than half of those who heard of the disease (56.8%) did not do the test. However, higher education, religion, occupation and age were statistically significant to the testing including other factors such as benefits of receiving treatment if turns HIV positive among others. This Nigeria-based

study aimed at determining the willingness of pregnant women to accept VCT corroborated their decision when all respondents who accepted VCT in the study were willing to be tested if results remained confidential and 89% would accept if they were tested simultaneously with their partners. Overall, the acceptance of VCT appears to depend on the understanding that VCT has proven benefits for the unborn child (Okonkwo et al, 2007). Below explains the reasons for their decision to do the HIV test.

5.3.1 Socio-demographic factors of the respondents

The Ho study revealed that with most of the variables of interest, significant variations do not exist between the rural and the urban dwellers. This indicates that health education has not been urban area centered. Teenagers, 15-19 years who are supposed to be in school formed 8.4% of the respondents in the Ho study. Out of this number only 5% of them did the test. Fear was found to be the deterrent to testing as well as disclosure if test positive for HIV. ICRW,(2002) supported the assertion when it was found that stigma as well as fear of disclosing one's sero-status deter pregnant women from accessing PMTCT services. National AIDS/STI Control Programme, (2005) reported that young women aged 15-24 are bearing the brunt of new infections in sub–Saharan Africa. UNAIDS, WHO, 2007 corroborated that girls and women aged 15 and and older comprising 50% are living with HIV. It is therefore a serious concern that their vulnerability of becoming school drop-outs and economic dependent due to pregnancy including the possibility of contracting sexually transmitted infections may give them complications later in life.

The women in their 25- 39 year groups (comprising 65.9%) scored highest in both testing and not testing because they are interested in giving birth so as to justify their

reproductive status in the society and therefore may test so as to have safe delivery or may not test to protect sex because of the need to give birth. Taha et al, (1997) revealed that pressure to reproduce made them not to protect their sexual behaviours even if not married therefore may shy from actions that may put restrictions on their quest to give birth. Also majority of the respondents have been found to be married hence the reason why the men were solidly behind the women's testing for HIV. This will be a good platform to encourage couple counseling as well as family testing. However, 11.9% of respondents were found not married. This means that pregnancy might have been unplanned. Targeting this group of pregnant women as well as those cohabiting with convincing messages can motivate them to know their HIV status early so as to make informed decisions. Out of the 39 respondents who were single or cohabiting, 94.9% agreed that they will opt-in for the CT. This indicates the willingness of the respondents and therefore the need to match up this with the availability of the service at most facilities.

A higher number of people with higher educational status accepted HIV testing as compared to those with lower education in the Ho Municipality. This finding is in agreement with other studies of Abdi et al, (2003) and UNAIDS (2000), that better educational status was associated with a higher chance of VCT acceptance (CSA. Demographic and Health Survey, (2000). The finding also supports a previous study of regional distribution also in Ghana, Brong Ahafo region, where women had the highest VCT uptake and both education and wealth status influenced their decision to test (GSS, NMIMR, ORC Macro, 2004). Skinner et al, (2005) confirmed that the Socio-economic

context can present a formidable barrier to the provision of PMTCT services. Painter et al, (2005) also identified socio-demographic factors.

In reality, the HIV test is free in Ghana therefore financial constraint was not mentioned as a barrier. The findings were contrary to the findings of Janell et al, (2004) that high cost of test and distance were the biggest barriers to testing for HIV. Even in the community FGD, the men were ready to send their women back for the test if they should come back home that they objected to the test. The findings of the study perfectly agreed with the male FGD participants and the women who atested that husband's influence was not a major deterrent to testing for HIV.

5.3.2 Accessibility

In Ho, Ghana, the study revealed that there were no PMTCT centres in the four districts except two in the Municipal capital. Clients travel several kilometers to access the HIV test without any complaint but the FGD in the districts appealed for the community sitting of the Clinic for easy accessibility of their farming villages which are unmotorable and with no health facilities nearby. One important assumption is that because the villages as well as the services are not accessible, the youth of the area who travel to the cities and border towns might have acquired the disease and bring to the village but since they do not attend antenatal services until they deliver, testing for HIV becomes very difficult to establish. According to Nuwaha et al, (2002) factors that influenced the HIV testing were physical accessibility of VCT among others he added. Mofenson, (2003) corroborated that limited access to and acceptability of VCT in some countries may block the uptake of PMTCT). The Respondents in the Ho study shared the same thoughts with

Wilfert (2002) and Moore (2003) when almost all the respondents mentioned knowing one's sero-status so as to access treatment to prevent transmission of the virus to the child.

Out of the 310 respondents in the study only, 43.2% went for the test. Out of this number 61.9% came from the urban areas. They mentioned their own motivation to test 47%, counselor's conviction 28.4%, benefit of knowing one's status 10.4% with influence of husband constituting 2.2%. Sixty three percent of the rural women mentioned self as against 54% from the urban respondents which meant that the women in the rural areas are more independent and empowered by their husbands to take decision themselves. Accessing treatment is also a strong determinant of testing. According to Coovadia, (2004), when the mother gets access to ART and gives birth by caesarian section the rate of HIV transmission is just 1%. However, in the absence of treatment, the transmission rate between mother to the child during pregnancy, labor and delivery is 25%. This might be the reason why treatment (46%), support (55.68%), care (54.64%) are so dear to the heart of the Ho Municipality respondents to go for the HIV test. Other motivators for the testing were confidentiality and satisfaction with privacy during counseling, for treatment, care and support. Supporting it is a Uganda study, where factors that influenced the HIV testing were sexual partner, physical accessibility of VCT; awareness of VCT and risk of HIV infection (Nuwaha et al, 2002).

5.3.3 Role of male partner

In the Ho study 50.43% mentioned husband's anger if they should take unilateral decision to know their sero-status. On the contrary, during the FGD the men pledged their full support for health services such that they will send their wives back if they fail to do any test. Three of them affirmed this when they recounted their interactions with the Midwives when they were invited to the clinic through their wives. Of those who actually tested only 2.2% of them mentioned husband's influence as a contributory factor which means marriage is not a strong determinant of testing for HIV. This may suggest that the men have given empowerment to the women so as to take decisions regarding their reproductive health. This partially supports a cross sectional survey in Uganda in the Busheyi district by Nuwaha et al (2002) where the 17% of 219 women who took the VCT mentioned the influence of sexual partner. Again the findings supported Bajunirwe et al, (2005) assertion that spousal involvement should be considered for the success of PMTCT programs when majority of women (72%) in his study thought that their husbands would accept the HIV test for themselves. This will solve the assertion made by Forsythe et al, (2002) that in many PMTCT programs where VCT is available, low community acceptance and use of VCT services is a major hindrance to identifying, counseling and treating pregnant women with HIV positive and treat them together with their partners (Forsythe, 2002; Gray, 2002; Kankasa et al, 2002. Contrary in a study by Luption et al, (1995), it was found that women rather than men influenced their spouses to test.

5.3.4 Service related Factors.

Low VCT uptake in Ho could be attributed to low education about the PMTCT due to lack of trained counselors as confirmed by FGD and corroborated **(**Population Council, Ndola Demonstration Project, 2003; Martin-Hertz et al., 2000 and MOHSS, 2004). In many PMTCT programs where VCT is available, low community acceptance and use of VCT services is a major barrier to identifying, counselling, and treating HIV positive pregnant women and their partners (Forsythe et al, 2002). This low uptake is identified due to lack of awareness of the people. The male FGD in the study mentioned remarriage, relocation of wife, abandonment, uncoupling and divorce as a reaction to knowing a wife's positivity. Pathfinder, New seed and Future Generations among others were found to be into HIV health education and support and are doing well in Ho.

Unwillingness to participate in an intervention to prevent the baby from getting HIV depended on availability of maternal treatments (Stringer et al., 2005). Overall, the acceptance of VCT appears to depend on the understanding that VCT has proven benefits for the unborn child (Okonkwo et al, 2007).

The need to build PMTCT programs into existing maternal and child (MCH) services in resource-poor countries is widely acknowledged. HMH though was not having ART centre earlier on cooperated well with VRH for the supply of ART for its clients and the training of its staff. The four districts were not furnished with any skills leaving the Midwives behind in this fight against maternal and infant mortalityFrom the FGD it came out clearly that most rural deliveries were done without skilled labour which was neither the women's fault nor the birth attendant's fault but due to unavailability of health

facilities. A study found solution to the above problem that one of the most important PMTCT behavior change interventions may be to inform communities and TBA's that whether birth takes place at home or in a health facility there are improvements in childbirth-related behaviors and practices that can help to reduce HIV transmission not only to newborns, but also to birth attendants and others who may be present during and after birth (Temmerman et al, 1990).

It is a general notion that the youth do not respect but Ho respondents have confidence in their service providers such that when they were asked which counselor they would prefer to render the services to them 45.8% said they appreciated anybody given to them. This means that the staff is trustworthy. This is contrary to a study among pregnant women in West Uganda when they were found anxious about taking up VCT due to fear of confidentiality and fear that the maternity staff might refuse to assist them when they come to deliver with unknown status (Pool et al, 2001). It was alleged that some nurses disclose clients HIV status in public without informed consent (Stanhope and Lancaster, 2000). Clients on the other hand do not accept counselors who are younger than themselves (MOHSS, 2004).

Motivation of service providers has therefore been identified to improve service delivery. This is true of Midwives in Ho as they at times close at 17 hours and beyond and therefore need to be motivated. This burn out in might have tempted one of the care providers in Ho to turn away clients at times as complained by one of the female FGD members. She said:

> "*When I went to the Ho Municipal Hospital, I was told to come on the following Monday for the counseling and testing; however, when I went the Nurse told me she was tired and that I should come next time for the test.*" (Female aged 22years a hairdresser).

It has been shown that already-overburdened health workers in both resource-rich and resource-poor settings often have inadequate time or insufficient skills to carry out all of the extra tasks related to PMTCT programs (Rogers, 1997; Burger et al. 1997).It is worth noting that NACP have identified the problems and therefore tailored its training towards improving skills and quality of care delivered by health workers. It could be that the statement made by the above woman that the Midwife postponed the test can be misleading as most of the clients come to the antenatal clinics very late or leave the clinic area on seeing the large number of clinic attendants only to realise that nobody would be available on their return to the clinic area.

5.3.5 Supports for HIV Positivity.

In the study, the respondents mentioned support and care as a benefit of testing. This shows the importance that they place on support given by the care providers as well as support groups in Ghana such as Wisdom Association of Ghana where those who have recovered from the shock of HIV/ AIDS serve as mentors to the new ones coming to join the association. In Ho, NGOs like Future Generation and New Seed are continuously educating the public and supporting PLWHA (People living with HIV/AIDS). The support of family and the community is essential. Moore, (2003) supported the idea when he mentioned creating an enabling household environment to foster improved PMTCT practices are key objectives.

CHAPTER SIX

6.0 CONCLUSIONS AND RECOMENDATIONS

6.1 Conclusions

In conclusion, the participants were knowledgeable about the mode of HIV transmission such as, sex and blood but added water and food which are misconceptions and needed to be cleared. Knowledge about the third mode which was MTCT was inadequate hence the decline of testing among even those who knew about the disease. This could be the result of lack of knowledge due to information not reaching the people as the service providers in the district were not trained and the testing kits were also not available in the districts.

The participants perceived the disease as dangerous and deadly therefore HIV positive partner should be uncoupled, abandoned or divorced. Stigma, discrimination, fear of death and husbands anger deterred them from testing; nevertheless knowing ones sero-status for treatment, care and support motivated them to test.

About the decision to test both male and female FGD participants expressed their willingness to do the test and therefore made passionate appeal for the service to be set up in their communities and beyond to save them from dying. They never complained of financial constraints and the men were willing to support their wives to do any test with the reason that the midwives know what is good for them. This confirmed the decision of the HMH CT centre to enter the community and create awareness among the people regarding HIV infection, prevention, testing, disclosure and how to live positively with the disease. The clinic stated that discordant couple is the bane of testing, therefore the need for public education about the risk factors and how to prevent them.

In conclusion, age, religion, education and occupation among already mentioned benefits were statistically found to be the determinants of those who tested for HIV though they perceived some fears.

6.2 Recommendation

1. Radio and TV were the major source of HIV/AIDS information by the respondents, the media should therefore be encouraged to intensify its education of programmes so as to reach the people. Drama on both radio and TV should be major advocacy tools.
2. The daily health talk by Midwives at the ANC clinic prior to the day's services is worth noting therefore the need for all Midwives to be trained especially the district Midwives so that they can be knowledgeable and confident to create awareness among the communities for them to make informed decision about knowing their HIV status. This will help accelerate the "know your HIV status campaign".
3. In set ups where CT services are practiced cards of women who have not been tested previously at the ANC clinic could be sorted out first and given preferential treatment in order to avoid missing people. Couple and family testing should be encouraged and husbands including the entire family invited to the clinic to support the "know your HIV status campaign."
4. As the teenagers who are the entry point for the youth and are actively involved in sex and becoming school drop-outs due to pregnancy there is need for the Public

Health Nurses to include sex education in their school health services to augment what the teachers are already teaching them.

5. As child upbringing is a collective effort, the School Teachers need to involve parents in the fight against Teenage pregnancy and HIV/AIDS so that parents can appreciate guiding and monitoring their children while at home against risk behaviors such as watching midnight movies. Healthy behaviours such as participating in games, church and youth activities can be encouraged. This can be discussed at Parents and teachers (PTA) meetings.
6. Ghana Education Service as part of its sex education in schools on sexually transmitted infections (STIs) and diseases including HIV/AIDS can organise debates, quizzes and essay competitions for intra or interschool on topics such as, "How to Achieve Zero HIV/AIDS among the youth" This may bring out deeper thoughts about the disease and its control. Dramas, songs and other innovative means that can be employed to give education about the diseases clearly. Occasionally, guest lecturers could be invited to give talk to the school children.
7. Ministry of Health (MOH) and GHS to achieve universal testing need to integrate the PMTCT structures in all the districts and to ensure that there is effective commitment to the policy on HIV/AIDS .
8. Ministry of Information and Communication Studies (MICS) can review its mobile van education using puppet shows, cinemas as done in the past.
9. Ministry of Education (MOE) can also ensure that its policies of Free Compulsory Universal Basic Education (FCUBE) for all is enforced and if necessary prosecute offenders because education they say is the key to success and knowledge is power.

10. Chiefs and opinion leaders can be contacted regarding how best programmes like HIV testing education can be packaged to attract community members. They must be made to own the programmes for its success.
11. Community and church groups may be encouraged to discuss HIV programmes among them and come out with strategies to prevent the spread of the disease while maintaining the pride and dignity of those already living with the disease including Home-based care.
12. As Traditional Birth Attendants (TBAs) provide reproductive health services in the community, NACP could train them in HIV prevention and promotion of PMTCT Services so that they can encourage community members on the need for knowing their sero-status and to access skilled delivery if tests positive for HIV.

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"Barrel of Hope" Ghana TV3 Parliamentarians HIV/AIDS Campaign against Stigma, Saturday, August 2, 2008. (11:00-11:30am)

APPENDIX 1

QUESTIONNAIRE

FACTORS AFFECTING ACCEPTANCE OF CT AMONG

PREGNANT WOMEN IN THE HO MUNICIPALITY

I am a student from the School of Public Health, University of Ghana conducting a research on factors contributing to VCT acceptance among pregnant women in the Ho municipality. I would like to invite you to participate in the study. It is highly confidential. I assure you.

Please tick the responses as applicable to you. Thank you.

Researcher's Name: …….. Questionnaire No.: ☐☐☐

Date of Interview: ☐☐☐☐☐☐ Study Area…….

	SECTION A: BACKGROUND OF THE STUDY RESPONDENTS		
NO	**QUESTION**	**VARIABLE**	**COMMENTS**
1	AGE ☐☐	Q1AGE	
2	Marital status : Single/Never married…..1 Married…….2 Separated/Divorced……..3 Co-habitation……4 Widowed……...5	Q2MAR	

3	Educational level : None……..……..1 Primary……..…...2 JSS/MSLC…….……..3 SSS…….…..4 Vocational/Technical…..5 Tertiary/University……..6	Q3EDUC	
4	Religion : Christian……1 Muslim……2 Traditionalist/Spiritualist…3 Others (SPECIFY)……..4	Q4REL	
5	Occupation : Civil/Public Servant…1 Trader……...2 Farmer……..3 Fisherman……4 Artisan……..5 Unemployed……6 Others (specify)……...7	Q5OCC	
6	Ethnicity: Akan……....1 Ewe……2 Hausa……3 Others (specify)…….....4	Q6ETHN	
7	Place of Residence : Urban……1 Rural…… 2	Q7RES	

8	How did you get to the hospital? By Foot……1 Commercial vehicle…..2 Taxi……3 Private car……..4 Bicycle……..…….5 Others…..……6	Q8HOWH	
9	Number of children : None……....0 1…….……1 2…….2 3…….3 4…….……4 4+……...5	Q9CHN	
	KNOWLEDGE ABOUT HIV AND TESTING IN PMTCT		
10	Have you heard of HIV/AIDS before? Yes…….....……1 No…….……...2	Q10KNOW	If No skip to Q28
11	Where did you hear of it from? : Radio……1 TV…….……2 Print media…..……...3 Friends/Relatives….4 Workplace……5 Health workers…….6	Q11SORCE	Multiple Responses allowed

	Today at the clinic...7 Others (specify)……8		
12	How does one get infected with the virus? : Sexually…….1 Mother-to-child….2 Through blood…...3 Kissing……...4 Others……5	Q12INF	Multiple Responses allowed
13	How can one be protected against HIV/AIDS? : Abstinence……1 Faithfulness to sexual partner.…2 Condom use……..3 Others(specify)…....4	Q13PTECT	Multiple Responses allowed
14	State ways of Mother-to-child transmission of HIV that you know of : During pregnancy……1 During delivery…….2 During breastfeeding……3 Others(specify) ……..……..4	Q14MTCT	Multiple Responses allowed
15	How does one get tested for HIV/AIDS? Counseling and Testing(CT)……1 I do not know……...2	Q15TESTH	
16	Name the VCT and HIV services available at this Ante-natal clinic (ANC).	Q16SERV	Multiple Responses allowed

	Pre-test counseling……1 HIV testing……2 Post-test counseling……3 Feeding options……...4 ART/Prophylaxis……5 Others (specify)……..6		
17	In general what do you think are the main benefits of having HIV test? : Treatment……..1 Care……2 Support……...3 Knowing one's sero status...4 Others (specify)……...5	Q17BENF	Multiple Responses allowed
18	What do you think are the main fears of having an HIV test? Stigmatisation……1 Discrimination……2 Fear of death……3 Fear of husband's anger....4 Others (specify)……....5	Q18FEARS	Multiple Responses allowed
19	In your opinion do you think VCT should continue to be part of ANC services? : Yes……...1 NO……...2	Q19VANC	
20	What are the benefits of HIV test to the pregnant woman? Treatment……1 To receive care ……..2 To receive support…..3 To know one's status..4	Q20HPREG	Multiple Responses allowed

	Others (specify)…….5		
21	Do you think spousal involvement in VCT services is good? Yes……..……..1 No……2	Q21SINV	
22	Explain answer to Q21……	Q22COMIV	
23	Will you recommend neighbours and relatives in VCT services? Yes……..1 No……2	Q23BENCU	
24	Explain answer to Q23……..	Q24EXP	
25	What are the benefits counseling? Support…….1 Care……...…2 Stigma Reduction.…3 Reduces Isolation…..4 Others……....5	Q25BENCO	Multiple Responses allowed
26	Will you recommend this test to anybody? Yes……1 No……2	Q26RECOM	
27	Explain answer to Q26……	Q27EXPNO	

	PRE-TEST COUNSELING		
28	Did you talk about HIV testing today? Yes……1 No……2	Q28TAT	If No skip to 35
29	Did you discuss HIV testing today with your counselor? Yes……1 No……2	Q29CT	
30	Which component of HIV testing today did you discuss with your counselor? Prevention of HIV……1 Taking HIV testing……2 Post test results interpretation…….3 PMTCT programme……4 All the above……5	Q30CCNT	
31	What was your impression about the counseling? Good……1 Bad……2	Q31IMPC	
32	Did you ask any questions? Yes……1 No……2	Q32QUT	
33	If yes to above (Q32) were you satisfied with the answer given? Yes……1 No……2	Q33SAST	
34	Do you think the discussion was confidential? Yes……1	Q34THIV	

	No……..2		
35	If you have a choice, which of the following health workers would you prefer to attend to you during HIV counseling session? Female……..……..……1 Male……2 Someone older than you……..…3 Someone younger than you……4 Peer group…….…5 Anybody……...6	Q35CHO	Multiple Responses allowed
36	Did you test for HIV? Yes…….….1 No……..…..….2	Q36PTEST	If No skip to 47
37	If yes to above (36), what influenced your decision to test? Self……..…1 Husband…….2 Benefit of knowing ones status.…3 Counselor's conviction…...……4 Others (Specify)…….……5	Q37INFDT	
38	If no to above (36) do you plan doing it Yes…….1 No……..…….2	Q38PLANT	
	POST- TEST COUNSELING		
39	If you did the test, did you collect the results? Yes…….1	Q39COLTR	If No Skip to 47

	No……..……..2		
40	How was the post test counseling Frightening……..1 Helpful…….2 Sarcastic……3 Others (specify)……4	Q40POSTC	
41	Were you satisfied with the privacy and counseling given you today? Yes…….1 No…….……..2	Q41SATCT	
42	Explain answer to Q41……..	Q42EXPNO	
43	Were you satisfied with the waiting time? Yes…….……1 No……..……..2	Q43SAT WT	
44	Comment on general services? Good…….1 Bad…….……..2	Q44CMGS	
45	Would you recommend the service to others? Yes……...1 No……..… ….2	Q45RECSO	
46	If no explain why:……	Q46WYNO T	
47	If you are to choose between Opt-in and Opt-out which one will you prefer? Opt-in……...…..1 Opt-Out……..2	Q47INOT	
48	Explain your reason……. …… ……	Q48EXP	

Consent Form

I am a student from the School of Public Health, University of Ghana conducting a research factor contribution to acceptance of VCT in PMTCT service. I would like to invite you to participate in the study.

Your participation in the study will take about 30 minutes and it will involve you answering a few questions. If you do not feel comfortable with any question, you can refuse to answer it. You may also decide to withdraw from the study if at any point in the interview you do not feel comfortable to continue.

The interview will be recorded but this will not be shared with anybody. The information that you will give me in this interview shall be treated as confidential and shall only be used for the purpose of this study. If you have any questions regarding your rights as a participant in this study you may contact the Dean of the School of Public Health, Prof. Fred Binka and Marufatu Essie Braimah 024-2108173.

Please sign below if you agree to participate in the study?

Signature of participant: …….. Date……

THUMBPRINT: LEFT RIGHT:

APPENDIX 2

FOCUS GROUP DISCUSSION

AIM-:To determine the knowledge base of the participants on MTCT of HIV/AIDS

1) As a pregnant woman what do you do to keep healthy so as to have a safe delivery? SADEL
2) Where do women access care when they become pregnant? ACCESSCARE
3) What services are available at the place? E.g. HB, BP etc. AVASERV
4) This reminds me of an only blood test which they say is done at the Ante-natal clinic for pregnant women now. Are you people aware of Counseling and Testing(CT) for HIV/AIDS? KNCTHIV
5) What is it? KNHIV
6) Did you go for the TEST? PHIV
7) If no why? Explain.
8) If yes explain what you discuss before and after the Test? KNDISCBF/KNDISCAFTER
9) W hat is the mode of transmission of HIV/AIDS?
10) Mention ways that a pregnant woman transmits the infection to the baby(Pregnancy, delivery and breastfeeding)
11) How does one get tested for HIV/AIDS?(counseling and testing)
12) Should our spouses as well as other family members also do the HIV test?
13) Explain your answer to question 12
14) Kindly enumerate some benefits of CT.
15) Explain why one will not go for the HIV test. FACTINFDTEST
16) If you are to choose between “OPT-IN” and” OPT-OUT” which one will you prefer?

17) Explain answer to question 16.

18) If a pregnant woman comes to you for advice about how to have a healthy pregnancy to a successful delivery what would you tell her? ADVIPREGW

Appendix 3

In depth interview guide for PMTCT in-charge HMH

1. Age
2. Position and rank
3. How long have you been working here as a counselor?
4. Have you received any special training as a PMTCT in charge?
5. What services are available here?
6. How many cases do you see a day?
7. Tell me more about your clients.
8. What do you think are the practices in the community that would have contributed to the causes of HIV/AIDS?
9. What problems do the clients present?
10. Tell me about how you address those problems.
11. Apart from the ANC where else do you render your services?
12. What are the constraints that hinder your work?
13. Any solutions to the problems faced?
14. What is the way forward?