

Addis Ababa University Medical Faculty
Centralized School of Nursing

Acceptability of provider initiated HIV counseling and testing in pregnant mothers attending ANC at Nekemte town government health facilities East Wollega zone, Nekemte, Ethiopia, June 2009.

BY: ***TAHIR HASEN***

A thesis submitted to the school of graduate studies of Addis Ababa University, Centralized school of nursing, in partial fulfillment of the requirements of the degree of master in Nursing.

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Approval by the board of examiners

This thesis by ----- is accepted with recommendation of modifications by the board of examiners as satisfying thesis requirement for the Degree of Masters of Science in Nursing.

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Full Name-----Sign-----

Rank-----Date-----

Dedication

This thesis is dedicated to my lovely mother Aboze, My wife Zeine, My Hydo & Kalo, all my Sisters and Brothers.

Acknowledgement

First of all I am grateful to the almighty allah who helped me to write this thesis and Addis Ababa university, school of nursing and the IRB (Institutional Review board) Office for their unreserved guidance in preparation of this research thesis, I would like to forward my deepest appreciation and thank to my advisor Ato Hussein Mekonnen (MPH) for his unreserved help in reviewing my thesis and giving me constructive criticism and advice. My sincere gratitude and appreciation also goes to Oromia health bureau, East Wollega zonal health bureau, Nekemte hospital and Health center medical directors and staffs especially to MCH heads and staffs. I would also send my deepest appreciation to all my friends and those who gave me their precious time in data entry and analysis.

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Abstract

Background: Acceptability is the willingness of pregnant women to accept HIV counseling and testing (HCT) under the initiation of health care providers. It is one method of controlling and preventing HIV/AIDS. This study was conducted to determine the acceptability of PIHCT to pregnant mothers attended ANC at Nekemte government health facilities (Nekemte hospital and health center), east wollega zone.

Objective: To determine the acceptability of provider initiated HCT of pregnant mothers attended ANC at Nekemte hospital and health center.

Methodology: A cross-sectional study was conducted from May 25, to June 7, 2009. Valid and reliable modified standardized questionnaires and in-depth interviews were administered to pregnant women attended antenatal care during the study period.

Results: Totally there were 422 participants involved, of these 274 respondents were from Nekemte hospital and the rest 148 from Nekemte health center. The mean age of the study participants were 24.24 with SD of 5.02 and their age ranges were 16 to 40. The overall acceptability rates of the respondents were 370(87.7%). Almost all the respondents 412(97.6%) were knowledgeable to the three cardinal ways of prevention of HIV/AIDS (i.e. Abstinence, avoiding multiple sexual partners & sharing sharps). But 151(35.8%) of the respondents were knowledgeable to PMTCT during Pregnancy, child birth & breast feeding. Three hundred ten (73.9%) of the respondents perceived themselves not at risk of contracting HIV/AIDS. Pre-test counseling was given for 337(79.9%) of the mothers and the rest undergone with no pre-test counseling. ($P=0.002$, $X^2=9.25$, $OR=2.744(1.466-5.136)$, $df=1$). Three hundred thirty four (79.1%) of the mothers had the information to PIHCT. Health workers 260(61.6%) were the most common source of information. Media and religious leaders played a little role in dissemination of information. The percentages of mothers satisfied by the HCWs were 372(88.2%)($P=0.00$, $OR=4.531(2.276-9.021)$, $df=1$). and the trusting relationship between them was 392(92.9%). ($P=0.00$, $X^2=16.383$, $OR=4.531(2.276-9.021)$, $df=1$).

Conclusion: The study gives useful information to health care providers to introduce measures that could improve the utilization of antenatal HIV testing. Acceptability of pregnant mothers to PIHCT in this study is remarkable. Improving participation of religious leaders and media, partner involvement and encouraging couple counseling, improving the relationship between mothers and HCWs by giving continuous in-service and pre-service training for newly graduating HCWs and designing strategies on change of attitude and practice were recommended.

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Acronyms

PIHCT-Provider Initiated HIV Counseling and Testing

HCW-Health Care Workers

ARV-Antiretroviral Drugs

PMTCT-Prevention of mother-to-child Transmission

HIV-human immunodeficiency Virus

MOH-Ministry of Health

HAPCO-HIV/AIDS Prevention and Control Organization

IP-Infection Prevention

VCT-Voluntary Counseling and Testing

PEP-Post-exposure Prophylaxis

ANC- Antenatal Care

UNICEF-United Nation's International Children's Emergency Fund

WHO-World Health Organization

AIDS-Acquired Immunodeficiency Syndrome

CSA-Central Statistical Authority

UNAIDS-Joint United Nations Program on HIV/AIDS.

PLWHA-People Living With HIV/AIDS.

KAP- Knowledge, Attitude and Practice

CHAPTER-ONE

1. INTRODUCTION

1.1. Background

HIV counseling and testing (HCT) is a key strategic entry point to prevention, treatment, care and support services. This is critically important for individuals and couples to learn about their HIV status and make informed decisions about their future (1). In all types of HIV epidemics, health care providers should recommend HIV testing and counseling as part of the standard of care to all adults, adolescents or children who present to health facilities with signs, symptoms or medical conditions that could indicate HIV infection. These include, but are not necessarily limited to, tuberculosis and other conditions specified in the WHO HIV clinical staging system (2). HIV testing and counseling as early as possible during pregnancy enables pregnant women to benefit from prevention, treatment and care and to access interventions for reducing HIV transmission to their infants (2).

A substantial proportion of women present to health facilities at the time of labor without having previously accessed antenatal HIV testing and counseling. Although antiretroviral prophylaxis for PMTCT is most effective when given during pregnancy, labor and in the early postpartum period, it has also been shown to be effective when started at the time of labor and/or in the infant shortly after childbirth (3). Therefore, HIV testing and counseling should be recommended to all women of unknown HIV status in labor or, if this is not feasible, as soon as possible after delivery.

Two growing bodies of evidence contribute to the importance of reaching a greater portion of people who are HIV positive, but do not know their status. First, people with HIV can greatly benefit from treatment that is initiated before they develop physical symptoms of HIV disease. Second, people who know they are HIV seropositive are more likely to adopt safer sexual and/or injecting drug

practices in order to protect their partners from becoming infected. When people know their serostatus and have access to care and information, they are better able to cope with the diagnosis; manage their illness; prevent transmission to others; and live satisfying and healthy lives (4). VCT means that HIV testing should be voluntary (i.e., done only with the informed consent of the individual), that it should be accompanied by adequate pre- and post-test counseling, and that the test results should be confidential. (5).

In the context of HIV interventions, this means that people have a right to know how to prevent being infected and to know their status. If infected, they have the right to information on how to access treatment, care and support (2). If sick, they have the right to know whether ART is needed immediately to restore health. Moreover, with increasing availability of ARVs, it can be argued that not investing in radical scale-up of testing and counseling as the gateway to treatment impedes people's right to the highest attainable standard of health. Failure of ART scale-up would result in the greatest human rights abuse of all: premature and avoidable death.

The shift towards more diversified approaches, to include not only diagnostic and voluntary counseling and testing, but also expanded provider initiated, couple, youth-friendly and home-based models. The government effort scaled up the numbers of sites and people tested, using existing and new cadres of community counselors, who both counsel and conduct testing. Task-shifting has been one of the most important innovations in the area of counseling and testing, using community counselors.

There are three types of HIV testing in Ethiopia: Client-initiated or voluntary counseling and testing, Provider-initiated testing and counseling and Mandatory HIV screening. At the same time as PIHCT is implemented, equal efforts must be made to ensure that a supportive social, policy and legal framework is in place to maximize positive outcomes and minimize potential

harms to patients. This includes: Community preparedness and social mobilization, adequate resources and infrastructure, Health care provider training, Health care provider codes of conduct and methods of redress for patients and a strong monitoring and evaluation system (1).

Ethiopia responded to the HIV/AIDS epidemic as early as 1985. The Federal Ministry of Health and the HIV/AIDS Prevention and Control Office (MOH/HAPCO) developed an HIV/AIDS policy, different guidelines (PMTCT, ART, IP, VCT etc) and strategic documents to create an environment conducive for the implementation of HIV prevention, care, and treatment and support programs. As part of this effort, the first counseling and testing guidelines were published by the federal Ministry of Health (FMOH) in 1996 and the second edition, currently in use, in 2002(1). Policy-makers, governments, and many international organizations and funders are not seriously addressing deeper research issues beyond simply the numbers of people getting tested (5). Research is needed into the experiences with HIV testing of populations such as pregnant women. Therefore, the aim of this study will be to determine the level of acceptance of pregnant mothers under the initiation of PIHCT in Nekemte hospital and health center.

1.2 STATEMENT OF THE PROBLEM

Despite recent progress, at the end of 2006 an estimated 39.5 million people globally were living with HIV, and more than 4 million new HIV infections occurred in that year. Sub-Saharan Africa remains the most affected region, with 24.7 million people living with HIV (nearly two-thirds of the global burden), while epidemics in Eastern Europe and Asia continue to grow (6).

Only 5–8% of individuals with Human Immunodeficiency Virus (HIV) infection globally are aware of their diagnosis (7). In the developing world, early 'in-program' mortality has been prominent in a number of HIV treatment programs, often due to patients presenting late for care with already advanced disease (3). In the ongoing effort to prevent new HIV infections and to treat

those with established infection, emphasis must be placed on developing strategies to effectively identify and engage HIV-infected patients into care, with HIV testing as a critical step.

Surveys in sub-Saharan Africa have shown that a median of just 12% of men and 10% of women had been tested for HIV and received the results. The result of low coverage and uptake of HIV testing and counseling and low levels of knowledge of HIV status is that the majority of people living with HIV access HIV testing and counseling only when they already have advanced clinical disease (8). Some treatment programmes have reported high early mortality in patients receiving antiretroviral therapy because of late presentation (9).

Despite the increasing number of HIV treatment programs in resource-poor settings however, uptake of testing is often low and many patients are being diagnosed only when they are profoundly immunosuppressed (10-11). Therefore, early detection of HIV infection is not only useful in preventing further infection but also part of the strategy to improve treatment outcomes. Greater knowledge of HIV status is critical to expand access to HIV treatment, care and support in a timely manner, and offers people living with HIV an opportunity to receive information and tools to prevent HIV transmission to others. Increased access to HIV testing and counseling is essential in working towards universal access to HIV prevention, treatment, care and support as endorsed by G8 leaders in 2005 and the UN General Assembly in 2006 (1).

Client-initiated approaches have been the primary model for providing HIV testing and counseling. Coverage of client-initiated HIV testing and counseling services is inadequate in both high-income and resource-constrained settings. WHO and UNAIDS strongly support the continued scale up of client-initiated HIV testing and counseling (13, 14). In the developing world and in high HIV-burden countries in particular, it is estimated that less than one in ten of HIV

positive individuals know their serostatus, between 1% and 1.5% of the population at large (31).

At the end of 2005, there were about 5.54 million people living with HIV in South Africa (SA), 3 100 000 (56%) were women aged 15 years and older. Young women aged between 25 and 29 are worst affected, with almost 39.5% of women in this age group living with HIV. HIV prevalence among young women (<24 years) has remained constant over the past three years, possibly indicating that the HIV epidemic among young people is stabilizing (16, 17).

The availability of HCT services in Ethiopia has been uneven, and even when available, uptake has been relatively low. Many people are reluctant to learn their HIV status when medical care for HIV-related illnesses and psychosocial support does not exist, and in the absence of community support and legal protection when they face discrimination and social marginalization (1).

A study done in Ethiopia on acceptability of VCT at Arba Minch hospital indicated the overall acceptability rate was 35% (56/161). The HIV/AIDS prevalence is high in Nekemte town. It was the third next to “Adama” and “Mettu”. But according to the 2004/05 Hospital VCT report it stands first from the region (13%) (54). Therefore, the aim of this study will be to determine the level of acceptance of pregnant mothers under the initiation of provider initiated HIV counseling and testing in Nekemte hospital and health center.

1.3. Significance of the study

There is no research done on this topic in the study area. So it is believed that it can be a reference for those who are interested to perform a research on the same topic. HIV/AIDS is the most common problem of the country, it may provide some recommendations. It may also guide planners and legislators to revise, modify or change their policies.

CHAPTER-TWO

2.1. LITERATURE REVIEW

2.1.1. Proportion of pregnant mothers' willingness to accept PIHCT

It is important to ensure that women identified as HIV-negative receive any necessary, immediate support to prevent becoming infected during the course of pregnancy and the breastfeeding period, as the risk of mother-to-child transmission is high if women seroconvert during these times. Women diagnosed HIV-positive should be encouraged to propose HIV testing and counseling to their male partners. (45).

In the industrialized world, a number of European countries have introduced PIHCT in the context of prenatal care. PIHCT appears to have resulted in considerable increases in testing uptake in the United States, United Kingdom, Hong Kong, Singapore, Norway, and Canada, where the majority of clients (4/5 or more in most studies) agreed to be tested (20). Studies in prenatal care settings in several low- and middle-income countries have shown that pregnant women were positively inclined to accept testing if they thought it could benefit their baby. Evidence from both resource-rich and resource-poor settings indicates that the uptake of testing increases when testing is routinely discussed and offered, and where it is well-integrated into prenatal care (22, 23, 24, 25).

The 2005 Cambodia Demographic and Health Survey indicated, with approximately 461,000 live births per year, it is estimated that about 9,700 pregnant women are HIV positive that 20-30% of these women are eligible for ART and that without any intervention, annually, approximately 3,000 infants may be infected with HIV through vertical transmission. (18).Based on UNICEF pilot programs, combined data from 9 African countries showed that , 43% of ANC attendees accepted VCT, 19% tested HIV+, and 39% of HIV+ pregnant women received ARV therapy. Combined data from call for action (CTA)

program participants, among 110,000 total women tested at ANC, 90% were counseled, and 80% tested, and among 17% who tested positive 58% of women and 30% of their newborns received antiretroviral therapy (45). In a Kenyan program, 73% of women attending ANC were offered VCT, 89% offered VCT accepted, and of the 6% of women who tested HIV+, 64% accepted treatment (49/76) (31). In Botswana, 56% of ANC attendees accepted counseling. 52% of those counseled were tested, 52% of women who tested HIV+ received ARV therapy and only 1/3 of those completed the course of therapy (26).

A study conducted on perceived risks and benefits and determined predictors of acceptance of voluntary HIV counseling and testing (VCT) among pregnant women in Zimbabwe indicated Forty women (23.5%) consented to VCT, and 16 (40%) were HIV positive. Women who saw VCT as lower risk (odds ratio [OR] = 2.3, 95% confidence interval [CI] [1.1–5.0]) and women who had had a stillbirth or child die (OR = 0.4, 95% CI [0.16–0.97]) were more likely to consent. Prenatal HIV VCT offers the best opportunity for prevention of mother-to-child transmission of HIV; however, less than 25% of women consented (27).

2.1.2. Proportion of the general community's willingness to PIHCT

Since the mid-1980s, when the first diagnostics for HIV were developed, there has been a broad consensus that all HIV testing should be confidential, accompanied by counseling, and undertaken only on a voluntary basis—with “informed consent” (28). This approach respects patients’ autonomy and has been demonstrated to facilitate care and prevention (29)

A study conducted in Kenya showed clients with multiple partners showed significant reduction of sexual partners at follow-up (16% to 6%) $p < 0.001$ and numbers reporting STI symptoms decreased significantly too (from 40% to 15%) $p < 0.001$ (31). A study in Uganda showed that among adults who were offered HIV testing at a hospital (about half of whom were subsequently found

to be HIV-positive), 83% were unaware of their HIV status, even though 88% had been to a health unit in the previous six months (29).

A study done in Ethiopia on acceptability of VCT at Arba Minch hospital indicated the overall acceptability rate was 35% (56/161). Fourteen (20.6%) were HIV positive and women were more likely to be HIV infected ($p = 0.029$). Unemployment and self-perceived high risk of HIV infection were associated with initial willingness (OR [95%CI]:2.6 [1.3–5.5] vs. 5.0 [1.1–22.4], respectively). The low acceptability of HCT among TB patients poses a challenge to the scale-up of TB/HIV collaborative efforts. This cannot be achieved through the traditional VCT alone and different alternatives have been proposed. One such approach is routine counseling and testing of patients, also called provider-initiated counseling and testing (18, 19).

2.1.3. Perceived barriers to PIHCT in pregnant mothers

Acceptability is the starting point for the success and impact of any health intervention. A number of studies have used both quantitative and qualitative methods to assess the acceptability of VCT in sub-Saharan Africa. In Uganda, in a qualitative study found that although almost all the women in their study were willing to take an HIV test and to reveal their HIV status to the maternity staff, they were anxious about the confidentiality of the results of their test. They also feared that once the maternity staff knew their serostatus, they might refuse to take care of them (57). Many of them expressed concern about the possibility of being blamed, separated or subjected to domestic violence once their husband knew they were HIV positive. Pool and colleagues concluded that although VCT was acceptable in principle, community sensitization and male involvement should be integrated into VCT programs. In contrast, in a study that was linked to a mother to child HIV intervention program in Abidjan, found high test refusal rates among the pregnant women who were approached. Most of the women who took the test also refused to come back for their results. Those who refused the test indicated that they

thought they were HIV positive and confirmation through testing could accelerate the progression of the disease. They were also afraid of the reaction of their relatives, particularly their spouses. Some of the women did not consider pregnancy to be an appropriate time to do an HIV test (59) Cartoux made similar findings in a study in Abidjan and Burkina Faso. They found that fewer women in Burkina Faso than Abidjan (7.6% versus 22%) refused to do the test. The most common reason for their refusal was 'to seek agreement of the partner' (56). In Bobo-Dioulasso, higher education level of partner was an important predictor for test refusal. Ignorance of the main mode of HIV transmission (sexual) in Abidjan and the main means of prevention (condom) in Bobo Dioulasso were associated with test refusal. In an international survey of voluntary HIV testing programs in developing countries in 1997, concluded that, in spite of many obstacles, VCT was feasible and acceptable for pregnant women aiming to reduce their risk of transmitting HIV to their children.

Acceptance rates of between 53%–99.7% were reported from various sites in sub-Saharan Africa. Given the fact that all the findings were made in the context of research, where VCT and other interventions were offered free of charge the researchers cautioned that the acceptability of VCT and other similar interventions were likely to differ when it came to be implemented as part of public health services in the various countries surveyed(60). A study in Lusaka, Zambia, also reported acceptance rates of between 72–90% among antenatal clinic attendants (61). Their findings, however, contrasted with those of Fylkesnes et al who, in a study in some selected rural and urban areas in Zambia, found most of the study populations to be unwilling to undergo VCT. In an account of their experiences, they cautioned against the overemphasis on high acceptance rates. In the light of their findings, and those of other researchers in other African countries, they questioned the validity of using the number of people who get tested as measure of the acceptability of VCT services (62).

Increasingly, the importance of the caution given by Fylkesnes et al is being appreciated as more insight is gained into the operationalization of VCT in Africa. The rates of return for test results seem to be emerging as an important measure of the “true” acceptability of VCT services. This lends credence to the concept of “overall acceptability” as applied by Cartoux et al. Overall acceptability takes into consideration both pre and post-test acceptability. It makes room for an individual, once counseled, to have time to reflect on the decision whether or not to go ahead with the test, and even after testing, whether or not to want to know its outcome. Such reflection is made independent of the health or research establishment, and is therefore likely to approximate a true and considered desire of that individual. It is in this respect however that questions have been raised about same-day testing programs and the appropriateness of applying the concept of overall acceptability to such programs (62). In an MTCT trial in Dar es Salaam, Tanzania only 16.7% of pregnant women who were enrolled informed their spouses about their positive HIV serostatus. The main reasons given were the fear of stigma, divorce and violence (63). It was found that out of the 270 pregnant women interviewed at the antenatal clinic in April–March 2002, 92.6% (95% CI 88.8 to 95.4) indicated a willingness to be tested for HIV. Significantly however, only 51% (95% CI 45.0 to 57.2) of the pregnant women considered HIV testing to be useful (63).

Numerous barriers to accessing appropriate HIV and drug-intervention services were reported (e.g., concern over confidentiality, lack of availability, and fear of stigmatization) (27). Studies in South Africa and Côte d'Ivoire have identified factors including 'fear of a positive HIV test', low levels of education and poor housing as associated with low uptake rates (35, 36). If people are unprepared for testing or for disclosure of their status, and are inadequately counseled at the time of testing, adverse consequences of testing — for which some persons tested will be unprepared — will likely also rise along with numbers tested. Among these potential consequences are abandonment by

family members, violence, abuse and psychological depression (5). The introduction of PIHCT in antenatal care clinics in Botswana appears to have caused neither reduction in the use of prenatal care nor decline in the proportion of people receiving test results (37), and in Zimbabwe has had no negative effects on post-test counseling rates or the delivery of antiretroviral prophylaxis (38). Concerns exist that PIHCT could deter clients from accessing health services. Although limited, the available evidence does not support those fears. Concerns also exist that in some settings increased knowledge and disclosure of HIV status may be accompanied by increased stigma, discrimination, abandonment and violence. In a review of 17 studies, negative consequences of disclosure, including violence, were reported in 3% to 15% of cases, with other studies reporting lower or higher frequencies (40,41,42,43,44) the latter in settings with high baseline domestic violence. A systematic review of partner notification in the United States found few negative consequences (45), while a study in Tanzania found that about half of respondents reported receiving support from their partner (46). Evidence from Kenya and Zambia shows that the majority of HIV-positive women reported positive outcomes with disclosure, including some who feared they would not receive support (47).

Client-initiated approaches have been the primary model for PIHCT. Coverage of VCT services is inadequate in both high-income and resource-constrained settings. WHO and UNAIDS strongly support the continued scale up of client-initiated HIV testing and counseling. Uptake of VCT has been hampered by many of the same factors that limit uptake of other HIV-related services, including stigma and discrimination, limited access to treatment, care and health services in general, as well as gender issues. A four-country survey in Asia showed that women were more likely to seek HCT because their partner was ill, representing failures of diagnosis, prevention, treatment and care (9). Underestimation of personal risk for HIV is also a frequent obstacle to uptake of client initiated VCT, especially on the part of men (13, 14, 15).

A study conducted in Gonder indicated that the results of behavioral variables showed the effect of others (friends, families, religious leaders and couples) who were found to have statistically very significant effect towards VCT acceptance ($p < 0.001$) (48).

2.1.4. Trusting Relationships between HCWs and clients

In Kinshasa, Democratic Republic of Congo Incorporating HCT into routine TB care was supported by HCWs (96%) and patients (99%). The trusting patient-provider relationship was a primary reason why most HCWs (74%) and patients (68%) preferred the HIV CT by TB nurse model. Some patients and HCWs were concerned about confidentiality issues (HIV status documentation and privacy of counseling) and the potential difficulty of refusing routine HCT when it was offered by TB nurses. Some HCWs also expressed worry about the increased workload (33).

Expanded testing and counseling requires changes in health care providers' behavior and the introduction of new skills. Standards of patient confidentiality need much more attention in many countries, including in-service training, support, and monitoring. Health care workers must build confidential HIV testing and counseling not only into protocols on paper, but concretely into daily clinical practice. Meanwhile, it is essential to give health workers the information and support necessary to manage their expanded obligations and to address their personal concerns and anxieties. To facilitate this evolution, WHO's HIV/AIDS Department has finalized training curricula and guidance for health practitioners on how to counsel patients and perform HIV tests in treatment settings as part of their standard clinical work-up. These materials incorporate the input of people living with HIV/AIDS and of health workers with front-line experience providing HIV/AIDS care and treatment in resource-poor settings. WHO is also promoting wider testing and counseling for health care workers as an entry point for their own access through occupational health services and through wider provision and uptake of post exposure

prophylaxis (PEP) (23). As treatment access increases, and community education becomes broader and more effective, widening the gateway to testing and counseling will help lift the veil of stigma and fear that has surrounded the diagnosis of HIV for far too long.

In Jijiga town, of youth who underwent testing: 90.9% were satisfied with the service provided. the reasons for not satisfied were unclarity of the counseling, lack of privacy, no warm reception, unavailability and no link to care and support, lack of confidentiality and expensiveness of fees. According to the providers report, VCT services in hospital and health center were utilized more by pregnant mothers. Being female, older youth, educated at least to secondary school and being sexually active has statistical significance association with VCT utilization (32).

2.1.5. The right of clients to undergo the test

Provider-initiated HIV testing and counseling is neither mandatory nor compulsory. WHO and UNAIDS do not support mandatory or compulsory testing of individuals on public health grounds (13).

The document recommends an “opt-out” approach to PIHCT in health facilities, including simplified pre-test information, consistent with WHO policy options developed in 2003 and with the 2004 UNAIDS/WHO Policy Statement on HIV Testing. With this approach, an HIV test is recommended 1) for all patients, irrespective of epidemic setting, whose clinical presentation might result from underlying HIV infection; 2) as a standard part of medical care for all patients attending health facilities in generalized HIV epidemics; and 3) more selectively in concentrated and low-level epidemics. Individuals must specifically decline the HIV test if they do not want it to be performed. Additional discussion of the right to decline HIV testing, of the risks and benefits of HIV testing and disclosure, and about social support available may be required for groups especially vulnerable to adverse consequences upon disclosure of an HIV test

result. An “opt-in” approach to informed consent may merit consideration for highly vulnerable populations (52)

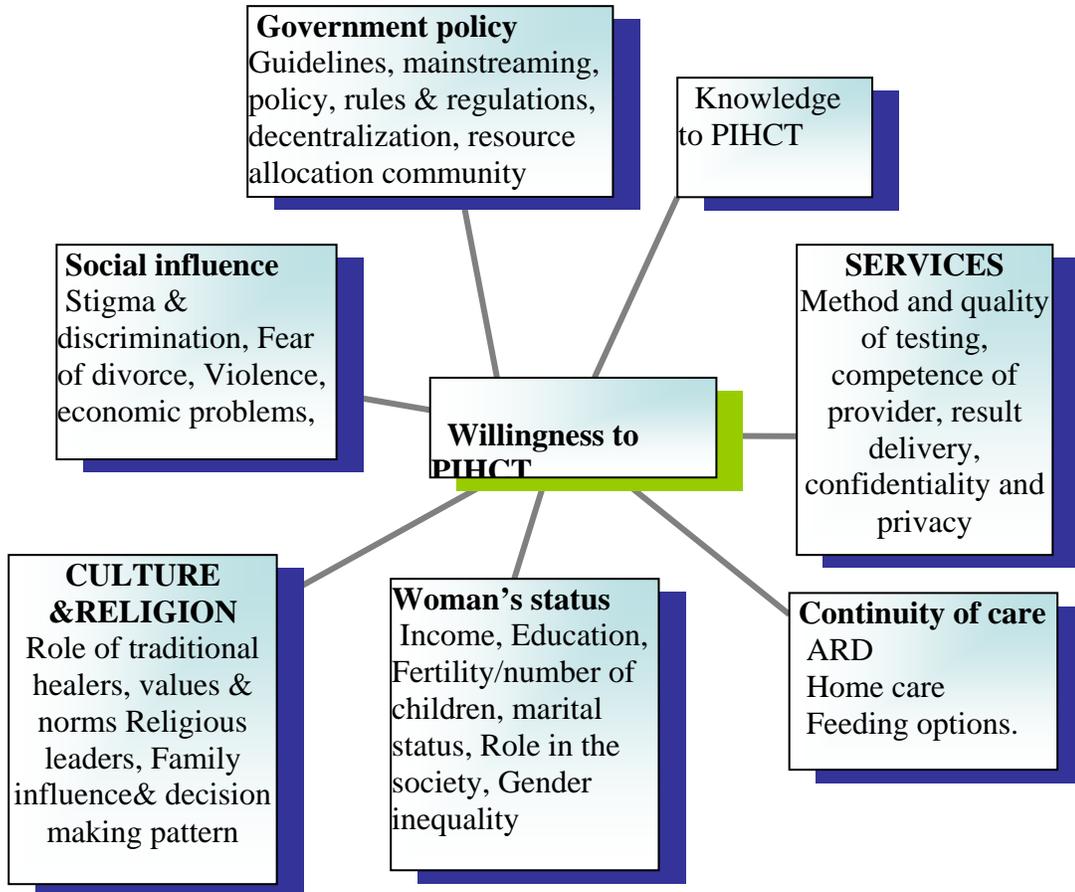
2.1.6. **Methods of HIV prevention**

The treatment access programme in Khayelitsha, South Africa, has seen a 12-fold increase in numbers being tested annually since ARVs were made available and testing and counseling opportunities were expanded (23). PMTCT during pregnancy, labor, delivery and breastfeeding (49) can be achieved through improved ANC services, providing ART to HIV positive women during pregnancy, safe delivery practices such as elective caesarian section, the use of breast milk substitutes to avoid MTCT of HIV through breast feeding.

Much of the HIV testing in the developing world is done through maternity clinics offering ART for PMTCT of HIV or specialty VCT clinics to which people come desiring knowledge of their status. In the context of HIV interventions, this means that people have a right to know how to prevent being infected and to know their status. If infected, they have the right to information on how to access treatment, care and support (50). If sick; they have the right to know whether ART is needed immediately to restore health. Moreover, with increasing availability of ARVs, it can be argued that not investing in radical scale-up of testing and counseling as the gateway to treatment impedes people’s right to the highest attainable standard of health. Failure of ART scale-up would result in the greatest human rights abuse of all: premature and avoidable death.

In Mbarara hospital in Uganda, increased uptake of HIV testing appeared to be associated with clinical benefits for patients. People diagnosed HIV-positive after PIHCT was introduced were at an earlier clinical stage and had higher CD4 counts than those identified beforehand, and were therefore more likely to be referred to treatment at an appropriate time (51).

Conceptual Framework showing willingness to PIHCT & other variables.



CHAPTER-THREE

3. Objectives

3.1. General Objective:

To assess acceptability of PIHCT in pregnant mothers attending ANC at Nekemte Hospital and health center.

3.2. Specific objectives:

- To measure the proportion of pregnant mother's willingness to PIHCT.
- To identify perceived barriers of PIHCT in pregnant mothers attending ANC.
- To assess the trusting relationship between the provider and pregnant mothers.

CHAPTER-FOUR

4. Materials and Methods

4.1. Study Area:

This study was conducted in Nekemte hospital and health center found western part of Ethiopia east wollega zone, Oromia region, 331km far away from Addis Ababa. It is a town situated on an area of 31.92 hectares. The town has an altitude of 2045meters above sea level and is considered to have a temperate climate. It is found at the junction point of the roads connecting different zones and regional states. Namely, Nekemte-Bure-Bahardar, Nekemte-Gimbi- Assosa, Nekemte-Badele-Jimma and Nekemte- Addis Ababa, which render the town the opportunity of accommodating tremendous travelers per day for different purposes.

Nekemte town is the capital of east wollega zone. It is divided in to six sub cities. The total population of the town is 80,620 according to the 2004 federal

CSA abstracts (53) and is estimated to be 90,387 when projected to 2008 by considering 2.9% as a natural increase (RNI) for Oromia region (54).

Health and Health related Indicators: The existing health facilities rendering health service in the town include: one hospital, one health centre-both governmental, two NGO clinics, seven middle level and 13 small private clinics, five drug stores and supplies, three pharmacies and five rural drug venders. The town has got 24hours electricity and telecommunication services. Due to such infrastructures developments as well as accessibility to different businesses, there is a continuous influx of people from rural areas to the town.

The ANC attendant in Nekemte town is increasing from time to time (9.1%, 11.3% and 13%) in 2001, 2002 and 2003 respectively (54). The total number of mothers attending ANC in the town in 2008 is 4,700 with 1,800 new and 2,900 repeatedly attending pregnant mothers at the hospital and the health centre. The average pregnant mother attending Nekemte hospital ANC clinic daily was ranging from 15-25 and 10-15 in Nekemte health center. The HIV/AIDS prevalence is high. It was the third next to “Adama” and “Mettu”. But according to the 2004/05 Hospital VCT report it stands first from the region (13%) (54)

4.2. Study design:

A cross-sectional study was conducted in Nekemte hospital and health center.

4.3. Study period:

The study was conducted from May 1, to June 7, 2009.

4.4. Source population:

All Pregnant women who attended ANC in Nekemte hospital and health center were included.

4.5. Study population:

The study subjects were all pregnant women who attended ANC at government health facilities (Nekemte hospital and health center) were included in a study from May 1, to June 7, 2009.

4.6. Sample size:

The following assumptions were made to determine the sample size: to obtain minimum sample size, the population proportion for prevalence of acceptability of PIHCT were taken to be 50%, with the margin of error (desired precision) 5%, 95% confidence interval. The total populations of pregnant mothers were expected to be greater than 10,000. The actual sample size was calculated using single proportion formula.

The formula to calculate the sample size

$$n = \frac{(z\alpha/2)^2 p(1-p)}{D^2}$$

$$= \frac{(1.96)^2 \times 0.5(1-0.5)}{(0.05)^2}$$

$$= 384 + 38 = 422$$

On the sample size 10% contingency (38) was added, therefore, the total sample size was 422.

Z α /2 = the confidence limits of the survey result (critical value at 95% confidence interval of certainty) = (1.96)

P = the proportion of study population to accept PIHCT = 50%

D = the desired precision of the estimate (the margin of error between the sample and population (5%))

n = the total sample size (422)

4.7. Sampling methods:

In this study Nekemte hospital and Nekemte Health center were selected to study pregnant mothers who were presented at the time of data collection from May 1, to June 7, 2009. The sampling technique selected for the study was systematic sampling. The data contains quantitative and qualitative analysis. The pregnant mothers attended the hospital and the health center daily were ranging from 35-55 with 45 was the average. The data collection was conducted for one month (20 working days), from May 1, to June 7, 2009 (45×20 days=900). The sample size calculated was 422. (900/422=2.13). Therefore, the data collection was done 1:2 pregnant mothers who attended the

health institution during the study period. For quantitative data, modified standard questionnaires were used and for qualitative data, in-depth interviews and the interview was tape recorded to determine the willingness, perceived barriers, and trusting relationships between the HCW and pregnant mothers who attended ANC in Nekemte Hospital and health center.

4.8. INCLUSION CRITERIA

Specified inclusion Criteria was used to the study participants. The criteria which were used during the sampling process include that the client was pregnant woman, who had been living in the area for at least 6 months and may live with her Sexual partner or alone and has no history of mental illness and was able to communicate.

4.9. EXCLUSION CRITERIA

Mentally ill, critically sick, deaf and unconscious pregnant mothers who were unable to communicate were excluded from the study.

4.10. Variables:

Dependent variable

- Acceptability of PIHCT

Independent variables

- Sociodemographic variables (Maternal Age, Educational status, occupation, ethnicity, Religion, income, marital status, Family size and parity)
- Knowledge of the mother
- Attitude
- Condition of the room
- Sex of the counselor
- Perceived barriers for PIHCT
- Frequency of ANC visit
- Relationship of the mother with the HCW
- Pregnant mothers satisfaction level
- Confidentiality of information

4.11. Operational definitions:

- **Acceptability**- is the willingness of pregnant mothers to accept HIV counseling and testing under the initiation of health care provider.

- **Willingness to PIHCT**- is when a woman expresses her verbal agreement to use PIHCT.
- **Informed consent**- is agreement which is confirmed verbally by pregnant mothers after being informed by provider.
- **Antenatal attendees**- Are pregnant mothers who made one or more visits to health institutions for early detection and control of any health problem related to pregnancy.
- **Provider-initiated HIV testing and counseling (PIHCT)**- refers to HIV testing and counseling which is recommended by health care providers to pregnant mother attending health care facilities as a standard component of medical care.
- **Client-initiated HIV testing and counseling (Voluntary Counseling and Testing, or (VCT)** involves pregnant mothers actively seeking HIV testing and counseling at a facility that offers these services.
- **“opt-in”** is when pregnant mothers affirmatively agree to the test being performed after pretest information has been received.
- **“opt-out”** is when pregnant mothers specifically decline the HIV test after receiving pretest information if they do not want the test to be performed.
- **“Compulsory testing,” also known as “involuntary testing,”** is defined as testing without a voluntary element — i.e., without informed consent, at the behest of pregnant mothers or some institution other than the mother tested and, sometimes, with neither the fact of having been tested nor the result communicated to the person tested.
- **“Mandatory testing”** is defined as testing that would occur as a condition for some other benefit, such as donating blood, immigrating to certain countries, getting married, joining the military or as a precondition of other kinds of employment.
- **“Satisfaction”**- is defined as positive feelings of mothers towards the care rendered to them.

4.12. Data collection techniques and procedures:

Valid and reliable modified standard questionnaires and in-depth interviews were used to collect data from respondents. The questionnaires were translated to the local language (Oromiffaa) and (Amharic). The interpretations of the questionnaires were conducted by two experts (teachers) who had degree in Oromiffaa and Amharic languages. Pre-test was done before the main study on clients whose number was about 10% of the sample size of the main study and were not included in the main study. The lessons obtained from the pre test were included. The data were collected by five trained female nurses. Three in hospital and two in health centre in order to facilitate data collection time. The female nurses were preferred for more interaction between the respondents for great accuracy of information. Great care was taken during the training and supervision to avoid differences in interpreting the interview schedule.

4.13. Data Quality control Methods:

The following measures were taken to maximize the quality of data: the proposal was seen by the Institutional Review Board of Addis Ababa University and permission was granted for the study to be conducted from Addis Ababa University, Oromia regional health bureau, East Wollega zonal health bureau, Nekemte hospital and health center directors, matron, head nurses.

Five female registered nurses had collected the data after being provided with one day training. The Research advisor reviewed the interview schedule before the pilot study was conducted. He was asked to comment on the contents, the appropriateness and clarity of questions. The questionnaire was seen and commented by friends and other professionals. Study participants were told that their responses were extremely confidential at any circumstance. They were not coerced to participate in the study. Pre-test data collection instrument was conducted on 10% of the sample size. Supervisions were done every day during data collection time to each data collector.

4.14. Ethical Consideration:

In order to conform to the ethical and legal standards of the scientific investigation, the proposal was seen by the Institutional Review Board of Addis Ababa University and permission was granted for the study to be conducted from Addis Ababa University, Oromia regional health bureau, East Wollega zonal health bureau, Nekemte hospital and health center directors, matron, head nurses. In this study the HIV status of the interviewed mothers was unknown to the investigator. The interview takes place in a separate room in the ward, and the answers were treated anonymously. Participation was voluntary. This was clearly stated in the informed consent which the informants were asked to sign before the interview. The mother was also told that the information obtained from her was treated with complete confidentiality.

4.15. Data entry and analysis:

The questionnaire was checked by supervisor (principal investigator) for its completeness and entered in SPSS for windows (version 16) and analysis was done using multivariate logistic regression to see the effect of the independent variables on the dependent variables by controlling confounders. This statistical method was preferred because the dependent variable is one (outcome variable) that is acceptability and the independent variables were multiple.

Statistical significance was evaluated at 0.05 levels of significance. X^2 test, Multinomial regression and odds ratios were applied to see the association between the variables. Descriptive statistics were also applied as necessary. Tables and bar graphs were used to present data.

4.16. Communication of Results

To disseminate the results of the study, it will be published in local and international journals.

Chapter-5

5. Results

5.1 Sociodemographic profile of the study participants

Totally there were 422 participants involved in this study, of these 274 respondents were interviewed from Nekemte hospital and the rest 148 respondents were from Nekemte health center. The mean age of the study participants were 24.24 with SD of 5.02 and their age ranges were 16 to 40.

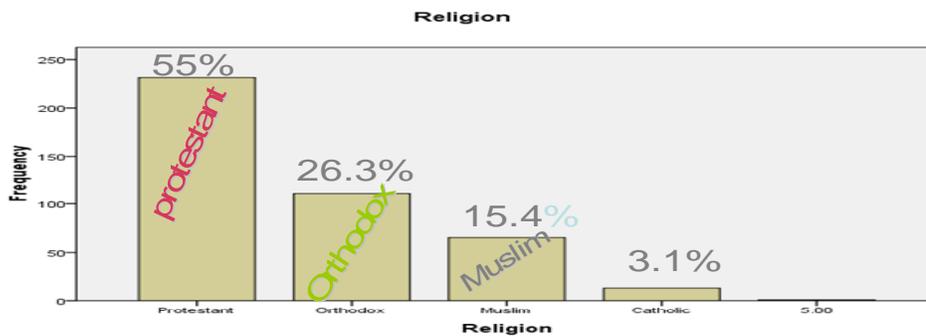


Figure-5.1 Distribution of respondents by religion. Nekemte, June 2009.

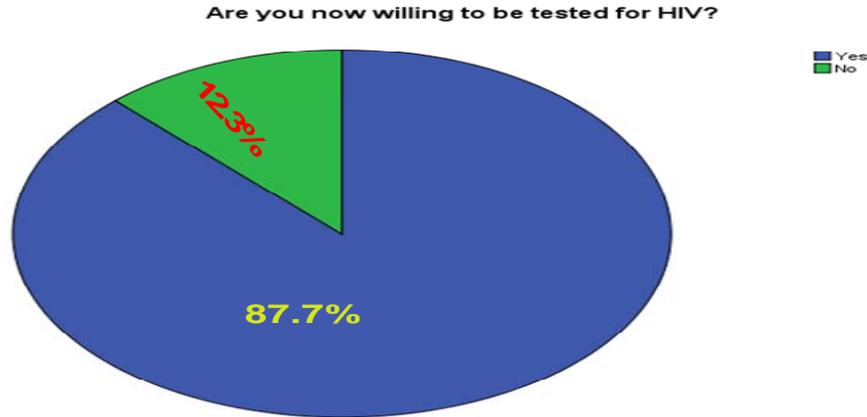
Concerning religion; Protestant accounts for 232(55%), Orthodox 111(26.3%), Muslim 65(15.4%) and Catholic 13(3.1%). With regard to their ethnic group 357(84.6%) of the participants were Oromo followed by Amhara 39 (9.2%), Tigre 15(3.6%) and Gurage 10(2.4%) (See figure-5.1). Of the respondents 401(95%) were married, 11(2.6%) single, 7(1.7%) divorced and 3(0.7%) widowed. Most, 170(40.3%), of the pregnant mothers participated in this study had primary education (grade 1-6) followed by illiterates 111(26.3%), secondary school 85(20.1%) and above secondary school were 56(13.3%). Two hundred sixty eight (63.5%), were housewives followed by government employee 56(13.3%) (See Table 5.1). The majority 171(40.5%) of the respondents had a monthly income between 500-1000 ETH birr where as 101(23.9%) had less than 500eth. birr (see Table 5.1).

Table 5.1. Sociodemographic variables of respondents acceptability to PIHCT in Nekemte government health facilities, June 2009.

Sociodemographic variables	Number	Percent	Cumulative frequency
Ethnicity			
Oromo	357	84.6	84.6
Amhara	39	9.2	93.8
Tigre	15	3.6	97.4
Gurage	10	2.4	99.8
Others	1	0.2	100
Total	422	100	
Educational status			
Illiterate	111	26.3	26.3
Primary	170	40.3	66.6
Secondary	85	20.1	86.7
Above secondary	56	13.3	100
Total	422	100	
Marital status			
Married	401	95.0	95
Unmarried	11	2.6	97.6
Divorced	7	1.7	99.3
Widowed	3	0.7	100
Total	422	100	
Occupation			
Housewife	268	63.5	63.5
Government employee	56	13.3	76.8
Merchant	52	12.3	89.1
Student	21	5.0	94.1
Daily laborer	17	4.0	98.1
House maid	8	1.9	100
Total	422	100	
Family size			
<5	358	84.8	84.8
5-10	58	13.8	98.6
>10	6	1.4	100
Total	422	100	

5.2 PROPORTION OF ACCEPTABILITY OF RESPONDENTS TO PIHCT

The overall acceptability rates of the respondents were 370(87.7%) and the rest 52(12.3%) were unwilling to PIHCT (See figure 5.2).



Percentage proportion of respondents willingness level. Nekemte, 2009.

Regarding age, out of the total study subjects those willing to be tested for PIHCT were 104(82.5%) ages 15-20, 137(87.3%) age 21-25, 85(90.4%) age 26-30, 33(100%) age 31-35 and 12(100%) age 36-40 were willing to PIHCT (See figure5.3).

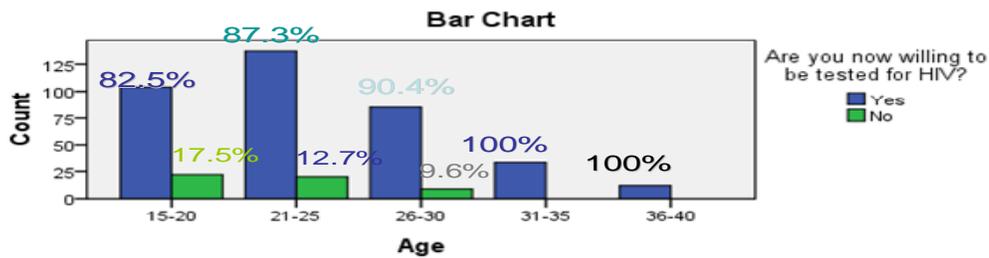
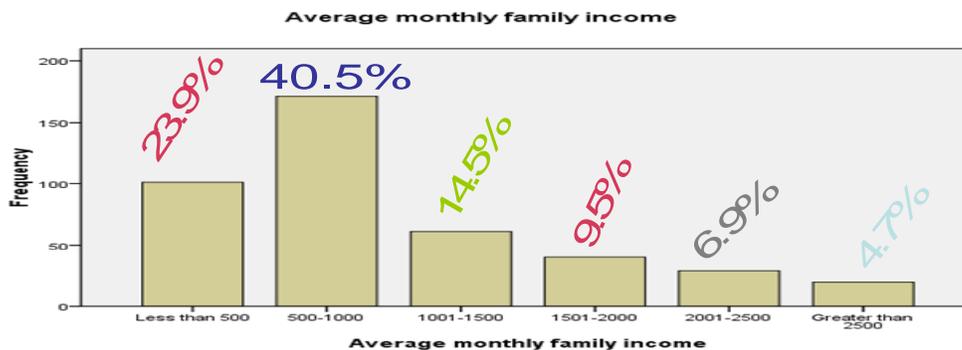


Figure-5.3. Comparison of willingness with age. Nekemte, June 2009

The results of the study with regard to religion indicated that among 232 protestant participants 203(87.5%), from 111 Orthodox participants 96(86.5%)

were willing, where as 60(92.3%) & 10(76.9%) participants were willing from Muslim and Catholic respectively. Three hundred twelve (87.4%) Oromo, 34(87.2%) Amhara, 13(86.7%) Tigre and 10(100%) Gurage ethnic groups were willing to PIHCT. With regard to the marital status, 401(95%) married, 11(2.6%) single, 7(1.7%) divorced and 3(0.7%) widowed mothers were participated in the study. Among these, 353(88%) married, 7(63.6%) unmarried, 7(100%) divorced and 3(100%) widowed mothers were willing to PIHCT. More over, 100(90.0%) illiterates, 141(82.9%) those attended secondary school, 79(90.0%) primary school and 50(90.0%) of those above secondary school were willing. With respect to occupation, 230(90.0%) house wives, 14(80.0%) daily laborers, 50(96.1%) merchants, 6(80.0%) house maid, 52(90.0%) government employee and 18(85.7%) students were willing to PIHCT.

The majority 158(92.4%) of respondents who had a monthly income between 500-1000 ETH birr and 74(73.3%) of those less than 500eth. birr were willing to PIHCT (See figure 5.4).



■ Fig-5.4 Average monthly income of respondents. Nekemte, June 2009.

5.3. Factors affecting acceptability to PIHCT

Three hundred seven (85.8%) of those respondents with less than or equal to 5 family size, 57(98.3%) of those five to ten and 6(100%) of more than 10 family members were willing to PIHCT. Of mothers having one pregnancy 107(83%),

two 101(87.8%), three 68(89.5%), four 41(87.2%), five 27(96.4%) and >5 26(96.3%) were willing to PIHCT.

Almost all the respondents 412(97.6%) were knowledgeable about the three cardinal ways of prevention of HIV/AIDS (i.e. Abstinence, avoiding multiple sexual partners & sharing sharps) and 8(1.8%) of them were knowledgeable to at least two of the three signs of prevention of HIV/AIDS. Very few percent 2(0.5%) said avoiding mosquito bite, avoiding living and eating together were ways of HIV prevention. Among those, 360(87.4%) of those who were knowledgeable to the three ways of prevention, 8(100%) of those who were knowledgeable to at least two of the three signs of prevention of HIV/AIDS were willing to PIHCT.

One hundred fifty one (35.8%) of the respondents were knowledgeable to the three methods of HIV transmission from mother to child during Pregnancy, child birth & breast feeding, 232(55%) were knowledgeable to one or two of the three methods of transmission and 39(9.2%) did not know the methods of transmission of the virus. Of those, 135(89.4%) of those who were knowledgeable to three methods, 196(84.5%) of those who were knowledgeable to one or two of the three methods and 39(100%) of those who did not know the methods of HIV transmission from mother to child during Pregnancy, child birth & breast feeding, were willing to PIHCT.

Among mothers who discussed about prevention of HIV/AIDS with their partner 262(91.6%), health workers 81(84.4%), sisters 12(63.2%), father 6(85.7%) and brothers 6(66.7%) were willing.

Three hundred ten (73.9%) of the respondents perceived themselves not at risk of contracting HIV/AIDS. One hundred ten (25.6%) of them said they might be infected with HIV. Among the reasons mentioned for being infected were multiple sexual partners 42(10%), unprotected sex 25(5.9%), did not trust their husband 28(6.6%), injection with unsterile needle 14(3.3%) and sexual contact

with HIV positive person 3(0.7%). Very few mothers 2(0.5%) reported that they did not know whether at risk or not. Of those having multiple sexual partner 38(90.5%), unprotected sex 19(76%), who did not trust their husband 27(96.4%), Injection with unsterile needle 14(100%) and Sexual contact with HIV positive person 3(100%) were willing to PIHCT (See figure 5.5).

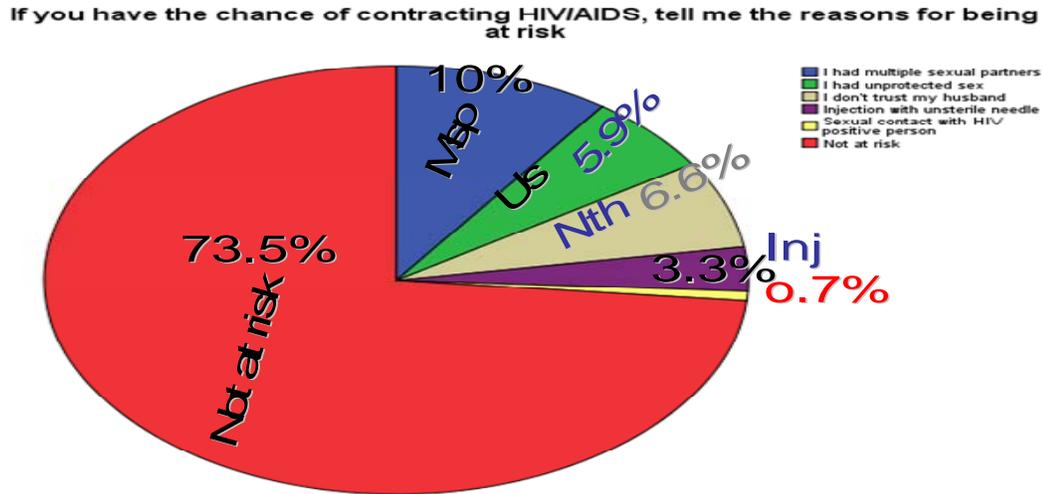


Fig-5.5 Distribution of risk perception of mothers to HIV/AIDS

From the total number of mothers, 154(36.5%) of them had an interest to ask the HCWs, if the HCW did not ask them. But 268(63.5%) of the mothers had no interest to ask the HCWs. Of these, 154(100%) who wanted to ask the HCW and 216(80.6%) who did not want to ask the HCWs were willing to PIHCT.

According to the opinions of the respondents, 283(67.1%) of them said an individual should be tested for HIV/AIDS any time, 89(21.1%) of them said it should be done before marriage & 39(9.2%) responded it has to be done when the person is critically sick. A few number 11(2.6%) said HIV testing should be performed when the person is manifesting the sign & symptoms of the disease. Of those, who replied it has to be done any time 259(91.5%), when critically sick 28(71.9%), when manifesting sign and symptoms of the disease 9(81.8%) and before marriage 74(83.1%) were willing to PIHCT.

The HCWs had given pre-test counseling for 337(80%) of the mothers and 85(20%) of the mothers been undergone the test with no pre-test counseling. Of those, who were given pre-test counseling, 304(90.2%) and 66(77.6%) who were not given pre-test counseling were willing to PIHCT with a statistical significance association ($P= 0.002$, $X^2=9.25$, $OR=2.744(1.466-5.136)$, $df=1$) (See fig 5.6)

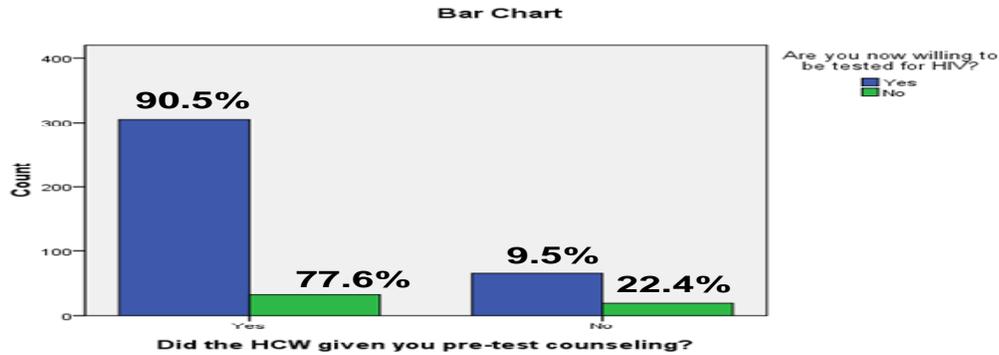


Figure-5.6 Comparison of willingness with pre-test counseling. Nekem, June 2009.

Questions regarding HIV testing against the will of pregnant mothers, 385(91.2%) of them said that it should not be done against the will of the mother and only 37(8.8%) of them said it has to be performed regardless of the will of the mother. Among the respondents who said HCT should be performed against the will of an individual, 36(97.3%) and those who said it should not be forced 334(86.8%) were willing. If HIV testing is declared to be performed against the will of the mother, 195(46.9%) of them said they would accept freely what the HCW told them, 110(36.5%) of them responded they would not accept even though they were forced, 46(11.8%) of them said they did not know what they would do & 19(4.7%) of them decided they wouldn't come to the health facilities again. Among the given reasons for HIV testing that it could not be forced 19(95%) said that they wouldn't come to the health facilities again, 46(92%) said they didn't know what they would do, 195(98.5%) replied that they accept freely what the HCW told them and 110(71.2%) they didn't accept even though they were forced were willing to PIHCT.

Table 5.2. Proportion of willingness of respondents to PIHCT in Nekemte government health facilities. Nekemte, June 2009.

Variables	Willingness		Total
	Yes	No	
How can people protect themselves from HIV/AIDS?			
Abstinence & avoiding multiple sexual partnership	1	0	1
Abstinence & avoiding sharing sharps	4	0	4
Avoiding multiple sexual partner & sharing sharps	3	0	3
Abstinence, avoiding multiple sexual partner & sharps	361	51	412
Avoiding mosquito bite, eating, living together	2	0	2
Total	371	51	422
What interventions are reducing MTCT of HIV?			
Avoiding breast feeding	191	14	205
Antiviral drugs	2	0	2
Avoiding breast feeding & antiviral drugs	117	34	151
I don't know	61	3	64
Total	371	51	422
The reasons of being at risk for HIV/AIDS			
I had multiple sexual partners	38	4	42
I had unprotected sex	20	5	25
I don't trust my husband	27	1	28
Injection with unsterile needle	14	0	14
Sexual contact with HIV positive person	3	0	3
Not at risk	269	41	310
Total	371	51	422
Did the HCW ask you to be tested for HIV/AIDS?			
Yes	342	48	390
No	29	3	32
Total	371	51	422
What would you do, if you were forced to be tested?			
I wouldn't come to this health facilities again	19	1	20
I don't know what I would do	46	4	50
I accept freely what the HCW told me	195	3	198
I didn't accept even though they forced me	111	43	154
Total	371	51	422
Do pregnant mothers be forced to be tested?			
Yes	36	1	37
No	335	50	385
Total	371	51	422

Regarding the information to PIHCT, 334(79.1%) had the information, and 88(20.9%) had no information whether PIHCT is functional or not. Of the 334 pregnant mothers who had the information 298(89.2%) and of those who did not have the information 73(83%) were willing. Among the respondents who said PIHCT is important to pregnant mothers 399(94.6%) and 23(47.8%) who said PIHCT is not important were willing to PIHCT with a statistically significant association ($P=0.00$ $X^2=23.837$, $OR=10.070(4.167-24.334)$, $df=1$).

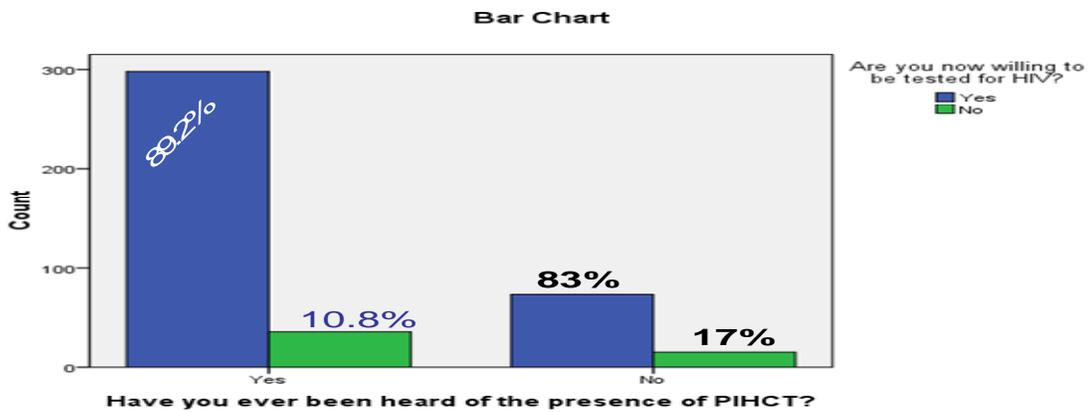


Figure 5.7 Comparison of willingness Vs information to PIHCT. Nekemte June 2009.

The sources of information to PIHCT were health workers 260(61.6%), Medias 46(10.9%), friends 26(6.2%) & religious leaders 2(0.7%). Among the respondents who got the information from HCWs 237(91.2%) ($P=0.017$, $OR=2.322(1.164-4.634)$, $df=1$), from friends 23(88.5%), from medias 38(82.6%) and religious leaders 2(66.7%) were willing to PIHCT (See fig 5.8).

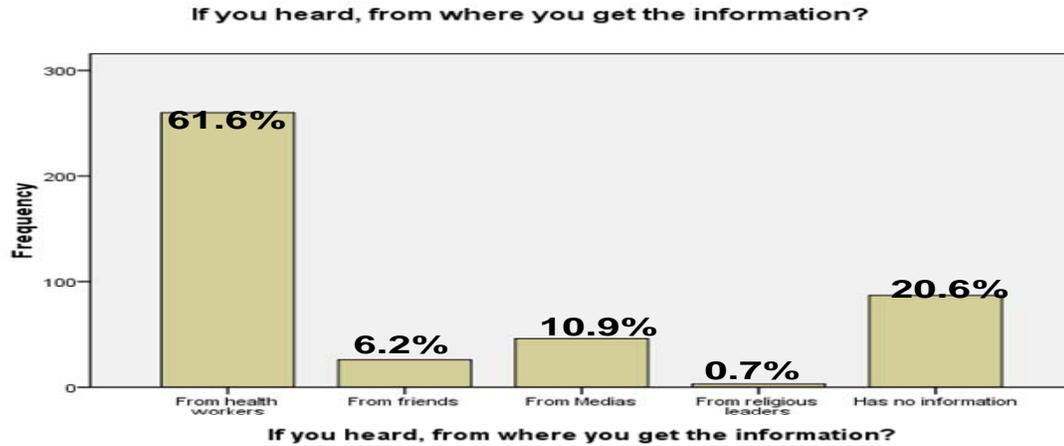


Figure 5.8 Source of information to PIHCT. Nekemte, June 2009

Regarding benefits of PIHCT to pregnant mothers, most of them replied three of the alternatives (It motivates mothers to be tested, knows self & PMTCT (43.6%)) (See fig 5.9).

The suggested reasons that PIHCT is not important were it increases pregnant mothers stress level because they were not ready 9(2.1%), It makes them not to give adequate information in fear of the test 6(1.4%), it distracts client-HCWs relationships 4(0.9%) and makes them not to come to health facilities in fear of the test 4(0.9%). From the given reasons that PIHCT is not important because (1) it increases their stress level that they were not ready 5(55.6%) ($P=0.004$, $OR=0.139(0.036-0.540)$, $df=1$). Mothers who were stressed in fear of the test refuses more than 7 times than those not in stresses. (2) It makes them not to come to health facilities in fear of the test 1(25%) ($P=0.005$, $OR=0.037(0.004-0.366)$, $df=1$). Respondents who have fear of the test refuses to come to the health facilities more than 27 times than those who want to know their serostatus. (3) It makes them not to give adequate information in fear of the test (66.7%) and it distracts client-HCWs relationships 2(50%) ($P=0.030$, $OR=0.111(0.015-0.813)$, $df=1$) were willing.

Among the pregnant mothers attending the health institution, 317(75.1%) had planned and wanted pregnancy. Only less than one-fourth had unexpected pregnancy. From 317(75.1%) participants with planned pregnancy 275(86.8%), and the rest 96(91.4%) with unexpected pregnancy were willing.

The counseling room in which PIHCT is carried out was rated well by 354(83.9%) of the respondents and uncomfortable by 68(16.1%) of the mothers. Of these, 313(88.4%) who said it was good and 57(83.8%) who said it was not good were willing.

Concerning the preferred sex of the counselor, 307(72.7%) of the respondents replied they had no problem for either sex, 87(20.6%) preferred female and 28(6.6%) male counselors. With regard to willingness 22(78.6%) of them who preferred male, 75(86.2%) of them who preferred female counselors and 273(73.8%) who said no problem for either sex were willing.

Two hundred twenty three (52.8%) of the mothers were tested by the initiation of the HCWs, 163(38.6%) their own initiation, 19(4.5%) their friends and 16(3.8%) husbands.

The reasons for refusing HIV test were fear of stigma and discrimination 171(40.5%), fear of violence & divorce 101(23.9%), Fear of severity of the disease 76(18.0%), Fear of losing job & economic problems 43(10.2%) and 31(7.3%) refused the test as they feel healthier. Among these, Fear of stigma and discrimination 150(87.7%), Fear of divorce & violence (87.1%), Fear of severity of the disease (89.5%), fear of losing job & economic problems (96.8%) and I feel healthier (81.4%) were willing to PIHCT (See fig 5.10).

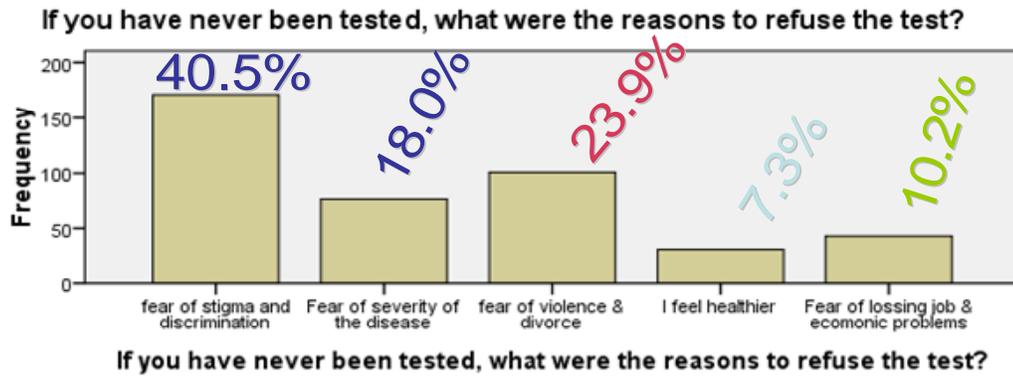


FIGURE 5.10 Reasons for refusal of the test. Nekemte, June 209.

Pregnant mothers who refused the test at this moment had planned to be tested after delivery 106(25.1%) ($X^2=32.141$, $P=0.002$, $OR=3.860(1.634-9.118)$, $df=1$), before initiating breast feeding 165(39.1%), ($P=0.000$, $OR= 4.884(2.210-10.791)$, $df=1$), any time after delivery 52(25.1%), they didn't decided when they will be tested 96(22.7%), One time in the future (12.3%) they never be tested any time (0.7%)

Concerning the frequency of ANC visit to health institution in this pregnancy were three times and above 153(36.3%), twice 139(32.9%) and once 130(30.8%). Of these, mothers who presented once 110(84.6%), twice 126(90.5%) and three times and above 134 (87.6%) were willing to PIHCT.

Table 5.3. Perceived barriers for pregnant mothers to PIHCT in Nekemte government health facilities. Nekemte, June 2009.

No	Variables	Willingness		Total
		Yes	No	
	Reasons for non importance of PIHCT			
	It increases my stress level	5	4	9
	It makes mothers not to visit Health facilities	1	3	4
	It makes mothers not to give adequate in formations	4	2	6
	It distracts client-HCWs relationships	2	2	4
	No response	359	40	399
	Total	371	51	422
	Benefits of PIHCT to mothers			
	It motivates mothers to be tested	4	0	4
	It helps to know self	82	9	91
	It helps for PMTCT	1	0	1
	It motivates mothers to be tested & knows self	90	7	97
	Knows self & PMTCT	28	7	35
	It motivates mothers, knows self & PMTCT	163	21	184
	Has no benefit	3	7	10
	Total	371	51	422
	Condition of the room in which PIHCT is given			
	Good	313	41	354
	Not good	58	10	68
	Total	371	51	422
	Source of information			
	Health workers	189	34	223
	Friends	154	9	163
	Medias	13	6	19
	Husbands	14	2	16
	Religious leaders	1	0	1
	Total	371	51	422
	Reasons for refusal of the test			
	Fear of stigma and discrimination	150	21	171
	Fear of severity of the disease	68	8	76
	Fear of divorce & violence	88	13	101
	fear of losing job & economic problems	30	1	31
	I feel healthier	35	8	43
	Total	371	51	422

5.4. Satisfaction of pregnant mothers to PIHCT

The trusting relationship between the HCWs and pregnant mothers was 392(92.9%) and 30(7.1%) did not trust their HCWs. Among those who trusted the HCWs, 346(88.3%) and distrusted 24(80%) of them were willing to PIHCT. Concerning degree of trust to HCWs, those who trust very much 207(49.1%) ($P=0.020$, $X=32.893$, $OR=9.190(1.1417-59.608)$, $df=1$), trusting much 99(23.5%) ($P=0.035$, $X=32.893$, $OR=7.636(1.151-50.666)$ $df=1$), somehow 51(12.1%), and little 65(15.4%). From these, very much trusting 191(92.3%), much trusting 89(89.9%), somehow 40(78.4%) and little 50(76.9%) were willing to PIHCT with a significant statistical association.

Reasons of distrust were (1) they had heard that HCWs disclose the secrets of their clients to others 32(14.2%), (2) HCWs knew pregnant mothers and disclose their secrets to others 60(7.6%) and (3) they didn't know that HCWs keep the secrets of their clients confidential 26(6.2%).

The percentages of mothers satisfied by the HCWs were good to excellent 372(88.2%), fair 22(5.2%), neutral 9(2.1%) and not good 13(3.1%). Among these, 337(90.6%) who were satisfied and 33(66%) who were not satisfied with the care given to them were willing to PIHCT having statistically significant association ($P=0.00$, $X^2=16.383$, $OR=4.531(2.276-9.021)$, $df=1$).

With regard to level of client satisfaction, highly 207(49.1%) ($P=0.020$, $X=32.893$, $OR=9.190(1.1417-59.608)$, $df=1$), moderately 137(32.5%) ($P=0.035$, $X=32.893$, $OR=7.636(1.151-50.666)$ $df=1$), and fairly 73(17.3%) were satisfied. Of those, 193(93.2%) highly satisfied, 126(92%) moderately satisfied and 48(65.8%) fairly satisfied were willing to PIHCT.

The degree of relationship between the HCWs and pregnant mothers were rated by the respondents as excellent 40(100%), very good 135(94.4%), good

164(84.1%), fair 16(72.7%), neutral 3(33.3%) and not good 12 (92.3%) were willing to PIHCT.

The reasons of satisfaction were: (1)the HCWs greets them in warm and positive manner 66(95.7%) ($P=0.000$, $X^2=19.229$, $OR=27.5(4.772-158.471)$, $df=1$), (2)explains the situation correctly and confidently 64(83.1%); ($P=0.010$, $OR=6.771(1.585-28.918)$, $df=1$), (3) they were eager to hear and understand their problems 88(92.6%) ($P=0.000$, $OR=15.714(3.425-72.102)$, $df=1$), (4) they were respecting their job and clients 91(84.3%) ($P=0.008$, $OR=6.691(1.629-27.492)$, $df=1$) and (5) come in time 57(89.1%) ($P=0.003$, $OR=10.179(2.201-47.067)$, $df=1$) were willing to PIHCT.

The suggested reasons for dissatisfaction were as follows: (1) the HCWs refuses to hear clients problems 17(4.0%), (2) they didn't come on time 11(2.6%), (3) they violets the rights of clients 5(1.2%) and (4) they undermines clients 3(0.7%). Among these, they violets the rights of clients 5(100%), refuses to hear clients problems 14(82.4%), didn't come on time 6(54.5%) and undermine their clients were willing to PIHCT.

The recommended remedy by respondents for the dissatisfaction of mothers were training of the HCWs 331(78.4%), replacing the HCW with other HCWs 65(15.4%) & Dismissal of the HCW 26(6.2%).

Table 5.4. Distribution of client-HCW relationship in Nekemte town 2009.

Variables	Willingness		Total
	Yes	No	
Reasons for satisfaction of mothers			
He/she greets us in warm and positive manner	66	3	69
He/she explains the situation correctly and confidently	65	12	77
He/she is eager to hear and understand our problems	88	7	95
He/she is respecting his/her job and clients	91	17	108
He/she comes in time	57	7	64
Not good	4	5	9
Total	371	51	422
Reasons for dissatisfaction between mothers and HCW			
He/she violets the rights of clients	5	0	5
He/she refuses to hear our problems	14	3	17
He/she doesn't come on time	6	5	11
He/she undermines us	2	1	3
Good relationship	344	42	386
Total	371	51	422
Have you satisfied with the care given to you?			
Yes	337	35	372
No	34	16	50
Total	371	51	422
How much you were satisfied?			
highly	193	14	207
Moderately	126	11	137
Fairly	49	24	73
No answer	3	2	5
Total	371	51	422
Do you trust HCW for your confidential information?			
Yes	347	45	392
No	24	6	30
Total	371	51	422
Reason of dissatisfaction			
He/she know me and can tell to others	27	5	32
I heard that HCWs disclose the secrets of clients	48	12	60
I didn't know HCWs keep the secrets of clients	18	8	26
No answer	278	26	304
Total	371	51	422

Table 5. Distribution of selected variables having statistical association with willingness to PIHCT, Nekemte, June 2009.

Variables	willingness		Total	P-value	OR
	Yes	No			
Source of information					
From Partner	237	23	260	0.017	2.322 (1.164-4.634)
Reasons for nonimportance of PIHCT					
It increases my stress level	5	4	9	0.004	0.139 (0.036-0.540)
It makes mothers not to visit Health facilities	1	3	4	0.005	0.037 (0.004-0.366)
It distracts client-HCWs relationships	2	2	4	0.030	0.111 (0.015-0.813)
Total	8	9	17		
Reasons of satisfaction					
He/she greets us in warm and positive manner	66	3	69	0.00	27.5 (4.772-158.471)
He/she explains the situation correctly and confidently	65	12	77	0.010	6.771 (1.585-28.918)
He/she is eager to hear and understand our problems	88	7	95	0.000	15.714 (3.425-72.102)
He/she is respecting his/her job and clients	91	17	108	0.008	6.691 (1.629-27.492)
He/she comes in time	57	7	64	0.003	10.179 (2.201-47.067)
Total	371	51	422		
Pre-test counseling given					
Yes	304	33	337	0.02	2.744 (1.466-5.136)
No	66	19	85		
Total	370	52	422		
Importance of PIHCT					
Yes	360	39	399	0.000	10.07 (4.167-24.334)
No	11	12	23	-	-
Total	371	51	422		
Mothers satisfaction					
Yes	337	35	372	0.000	4.531 (2.276-9.021)
No	33	17	50		
Total	370	52	422		
Degree of satisfaction					
highly	193	14	207	0.020	9.190 (1.1417-59.608)
Moderately	126	11	137	0.035	7.636 (1.151-50.666)
Total	319	25	344		
Degree of trusting r/ships					
Very much			207	0.001	3.581(1.658-7.736)
Much			99	0.027	2.670(1.116-6.385)
Total					

5.5. Qualitative Analysis

5.5.1 In-depth interview

To triangulate the findings of quantitative study, in-depth interviews were done among eight pregnant mothers attending Nekemte health center ANC clinic. The mean ages of the respondents were 27 years.

5.5.1.1 Respondents Risk perception to HIV/AIDS

Six of the 8 respondents perceived themselves not at risk of HIV infection. But two respondents perceived themselves they might be exposed to the infection due to different factors. Among these reasons one respondent replied, "*since I was a health professional, I can be exposed while I was assisting my patients in the health institutions*". The other respondent said, "*I doubt myself because I don't believe my husband*".

Among the six respondents who perceived themselves not at risk of HIV/AIDS. One respondent said, "*I am living with my husband and I believe him*". Five of them replied, "*I was free from multiple sexual contacts, sharing sharps and other*". Among these respondents one participant was tested and told free of HIV infection but three participants were not tested. Two participants responded, "*I afraid of god*".

5.5.1.2 Information to PIHCT

Questions regarding PIHCT, All the participants got the information of provider initiated HCT from the HCWs. Seven of the eight respondents agree with the importance of PIHCT. The reasons for the advantages of PIHCT were "*PIHCT is important because it helps to protect the family, self, the fetus and others*". But one mother did not agree with its importance. She complained, "*PIHCT is not important because it makes me not to give the necessary information and causes disturbance of the family*". All the respondents were asked to be tested. But six of them did not want to ask the health worker, one mother wanted to ask the

HCWs and one remaining mother said, *"I will ask him/her to be tested if he/she gave me adequate information regarding the benefits of / HIV/aids"*.

5.5.1.3 Knowledge of mothers towards antiretroviral drugs

Regarding the Knowledge of mothers in prevention of transmission of HIV/AIDS from mother to child, most of the pregnant mothers were unable to identify the effect of antiretroviral drugs in the prevention of the virus from mother to child. Two of the respondents said, *"Antiretroviral drugs cannot prevent mother to child transmission of the virus but it can reduce the chance of transmission."* The rest five respondent replied, *"ARV drugs only helps to prolong the life of the mother but not helpful for the fetus."* and one mother said, *"Antiretroviral drugs can prevent mother to child transmission of the virus."*

5.5.1.4 Reasons for refusal of the test

Concerning the reasons to refuse the test, they responded, *"most of the time we loss our hopes, we consider ourselves being an HIV positive as a challenging/devastating problem. It can also disturb the relationships of our neighbors that we cannot live together in fear of the virus."* In addition to the above another respondent stated, *"It can cause physical and psychological violence between wives and husbands."*

5.5.1.5 Trusting relationships between HCWs and mothers

All the respondents interviewed were willing to accept HIV testing. Regarding the trusting relationships between pregnant mothers and HCWs, respondents had tried to mention the positive and negative relationships in the health center. Among the negative relationships almost all respondents agree on, *"Kanaan dura kaardiin kutaa haadhooliin ulfaa qorataman kessatti akka salphaatti argachuu dandeenya turre, garuu yeroo amma kaardiin kutaa mana kaardii wali-galaa keessaa dhukkubsatoota biroo wajjin hiriirree baafachuun waan nurakkiseef dhukkuboota daddarboo adda addaatti saaxila ba'uu waan dandeeynuuf kan dur hin jirres kanfaltii haarawaa waan nugaafataniif akkasumas, akka salphaatti waan*

dadhabnuuf yeroo dheeraa dhaabbachuu hindandeenyu. Kanaafuu akkuma kanaan duraa kutaa haadhooliin ulfaa kessatti qoratamanitti akka deebi'ee argachuu dandeenyu akka ta'u barbaanna." The translation of the respondents words were interpreted as, *"Previously cards were easily obtained in the MCH clinic; we can get them easily. But this time, cards were transferred to the card room. It is difficult to get them. We were asked to pay for the card that previously not present. This had created a problem to us because we become easily tired and can't stop for longer time. Further more we may be exposed to different communicable diseases while we were struggling with other patients who were infected with communcable disease. So we need the cards to be returned to the MCH clinic as before."* In addition to the above mentioned problems one mother stated, *"It takes longer time to get the cards. I have many tasks at my home. I want to return soon"*.

Concerning the relationships between the HCWS and mothers were generally rated good except one mother who said, *"the relationship was not good. They look us angrily frowning their faces. We need them to show us a smiling face. They did not treat all clients fairly. They showed impartiality between us. They appointed us frequently and not found on their jobs. I stayed longer time in this health center waiting for them."* With the exception of this mother, all the seven mothers explained the relationship was good regardless of the problems related to the cards. Of the positive relationships mentioned, they said, *"When we get a problem, they performed what is expected of them. They told us, what we have to do. They counsel us regarding HIV/AIDS, Nutrition, rest and other activities."* One mother also supported this idea, *"They treat all mothers fairly with no any discrimination between the poor and wealthy people."*

5.6 Discussion

HIV testing during pregnancy enables pregnant women to benefit from prevention, treatment and care and to access interventions for reducing HIV transmission to their infants. The purpose of this study is to assess the proportion of willingness, perceived barriers and the relationship between pregnant mothers and the HCWs for acceptability of provider initiated HIV counseling and testing at Nekemte hospital and health center.

In this study, among the sociodemographic variables even though age had no statistically significant association with willingness, the percentages of willingness increases as age increases (82.5%, 87.3%, 90.4% and 100%). This indicates that as age increases responsibility to the family and the value for life increases. This finding is in line with a study conducted in Addis Ababa; after adjusting for all independent variables, patients in older age (≥ 25) were found four times more likely willing to PIHCT than younger ages (68). Regarding the age distribution of respondents more than 3/4th of the study participants were less than or equal to twenty five years and around 90% (89.4%) of them were less than or equal to 30 years. this shows the majority of the respondents were younger population.

In this study, Variables like educational status, higher income and marital status had no statistical significance with PIHCT. This finding is in line with a study conducted in Gondar, indicated that educational status didn't show statistically significant association with HIV testing (73). But different findings were obtained from the study conducted in Jimma and Addis Ababa, Teklehaymanot higher clinic and Gandi hospital found out that better educational status was associated with a higher chance of VCT acceptance (66, 69). The possible reasons for the difference could be due to the difference in the study design (case-control), sociodemographic characteristics and sample size.

Almost all the respondents 412(97.6%) were knowledgeable about the three cardinal ways of prevention of HIV/AIDS (i.e. Abstinence, avoiding multiple sexual partners & sharing sharps) and only 8(1.8%) of them were knowledgeable to at least two of the three methods of prevention of HIV/AIDS. This finding is consistent with a study conducted in Nigeria showed Almost all the women (96.1%) were willing to undergo HIV testing in pregnancy particularly if it would assist preventing transmission of HIV to their babies; but only few would undergo the test if the result would be shared with relatives.

Nearly 3/4th (73.9%) of the respondents had perceived themselves not at risk of contracting HIV/AIDS. From the qualitative analysis, six of the eight respondents (75%) perceived themselves not at risk of HIV infection. A recent report from Ethiopia and several African countries suggested that self-risk perception of being HIV infected has major influence on HIV test acceptability (14,15,37). The finding of this study was that significant proportion of sampled pregnant mothers (73.5%) had no risk perception for HIV infection. This finding is comparable to those in other studies conducted in Ethiopia and elsewhere (1,14,28,46). A recent Ethiopian BSS (behavioral surveillance survey) indicated that 75% of the study participants had no risk perception for HIV infection (28). This is higher than a study done in Gambia revealed some misconceptions relating HIV transmission were also reported in the study and the majority of the pregnant women (55%) perceived themselves as not susceptible to HIV/AIDS (65). Our finding is higher than results reported from Debrebirhan, where only 4.5% of youth had HIV risk perception (68)

One hundred fifty one (35.8%) of the respondents were knowledgeable to the three methods of HIV transmission from mother to child during Pregnancy, child birth & breast feeding, 232(55%) were knowledgeable to one or two of the three methods of transmission and 39(9.2%) did not know the methods of transmission of the virus. In qualitative analysis, five respondents (62.5%) replied, "*ARV drugs only helps to prolong the life of the mother but not helpful for*

the fetus." This finding is almost comparable with the study done in Gambia the majority of pregnant women (65%) and (51%) had high knowledge on the modes of HIV transmission and on MTCT of HIV respectively. Nearly half of the women had low knowledge on specific areas of MTCT such as the transmission of the virus through pregnancy, delivery and breastfeeding (65). From the results obtained, more than half (55%) of the respondents were deficient of the knowledge of PMTCT. In addition to this, around 10% of the respondents did not know methods of transmission of HIV/AIDS from mother to child during pregnancy, child birth and breast feeding. This finding is in accordance with the study done in Gambia, nearly half of the women had low knowledge on specific areas of MTCT such as the transmission of the virus through pregnancy, delivery and breastfeeding (65). This may warn the concerned body as knowledge was too low. To tackle this problem, strategies must be proposed to improve the KAP of the pregnant mothers as well as the community and integrating regular health education program into provider initiated HCT.

Among the respondents who discussed the methods of transmission and prevention of HIV/AIDS, acceptability is highest in those who discussed with their Partner 286(67.8%). This showed that mothers were more interested to accept information and put into practice when they heard from their partner. So partner involvement is important than any other family members. Discussing with sexual partner has statistical significance with willingness ($P=0.017$, $OR=2.322(1.164-4.634)$). Willingness increased more than two times when mothers were discussing about methods of prevention of HIV/AIDS with their partner. This finding is in accordance with the study done in Gambia the majority of the respondents (97%) would like to notify their partners about an HIV seropositive result and two third preferred to seek VCT together as a couple. Neighbors and other community members would never be informed of an HIV positive result and 80% of the respondents would not discuss their HIV serostatus openly if they were positive (65).

Concerning the preferred sex of the counselor in this study, the majority (at least 2/3rd) of the respondents had no problem for either sex, female 87(20.6%) and male 28(6.6%) counselors were preferred. This finding is not consistent with the study done in Tigray revealed the preferred sex to be female counselors and age above the clients (72).

From the total pregnant mothers who were participated in this study 87.7% of them were willing to PIHCT and in the qualitative analysis part, all the the respondents were willing to PIHCT. This finding is in line with the study conducted in Addis Ababa that showed 86% of the patients were willing to accept PIHCT (68). It was found that out of the 270 pregnant women interviewed at the antenatal clinic in April–March 2002, 92.6% (95% CI 88.8 to 95.4) indicated a willingness to be tested for HIV. Significantly however, only 51% (95% CI 45.0 to 57.2) of the pregnant women considered HIV testing to be useful (63,67). Another study showed the median overall acceptability of VCT was 65%, ranging from 33% to 95% and acceptance rates of between 53%–99.7% were reported from various sites in sub-Saharan Africa. A study in Lusaka, Zambia, also reported acceptance rates of between 72–90% among antenatal clinic attendants (61). In a Kenyan program, 73% of women attending ANC were offered VCT, 89% offered VCT accepted, and of the 6% of women who tested HIV+, 64% accepted treatment (49/76) (31). But based on UNICEF pilot programs, combined data from 9 African countries showed that 43% of ANC attendees accepted VCT, 19% tested HIV+, and 39% of HIV+ pregnant women received ARV therapy. In Botswana, 56% of ANC attendees accepted counseling. 52% of those counseled were tested, 52% of women who tested HIV+ received ARV therapy and only 1/3 of those completed the course of therapy (26). A study done in Ethiopia on acceptability of VCT at Arba Minch hospital indicated the overall acceptability rate was 35% (56/161). The difference between the study conducted in Arba Minch and this finding could be the expansion of ARV drugs, the awareness of the community, the study period and study design.

In this study, the HCWs had given pre-test counseling for 79.9% of the mothers and 20.1% of them been undergone the test with no pre-test counseling with a statistically significant association ($P= 0.002$, $X^2=9.25$, $OR=2.744(1.466-5.136)$, $df=1$) (See Table-5). This statistical significance showed that respondents who counseled were at least three times more willing than those not counseled. This is nearly comparable with the study done in Gambia the majority (92%) had gone through the pre-test counseling, but 82% have actually done an HIV test of which 72% had taken the decision independently (65).

The majority (79.1%) of the pregnant mothers had the information regarding provider initiated HCT. Most 399(94.6%) of the respondents agree on the importance of PIHCT with a statistically significant association of ($P=0.00$ $X^2=23.837$, $OR=10.070(4.167-24.334)$, $df=1$). This finding also agrees with the qualitative analysis, all the participants got the information of provider initiated HCT from the HCWs. Respondents who agree on the importance of PIHCT were willing about 10 times more than those who did not agree with its importance. This finding is comparable to the study done in Gambia nearly all the women, (98%) were aware of the existence of the PMTCT programme. Return rates were also found to be very high (91%). The need to know ones serostatus; and if HIV positive, be offered ARVs to protect the child and to prolong own life were factors that motivated or influenced women to accept HIV testing (65).

According to this study health workers were the most common sources of information (61.6%) to PIHCT with a statistically significant association ($P=0.017$, $OR=2.322(1.164-4.634)$, $df=1$). The qualitative analysis also showed all the respondents got the information from the health workers. Pregnant mothers who had the information from HCWs were two times and more willing than those who got the information from other sources. From this finding, religious leaders 2(0.7%) and media 46(10.9%) played little role in the dissemination of information regarding PIHCT. Benefits of PIHCT includes

initiation of pregnant mothers to be tested, it helps mothers to know their serostatus and prevention of mother to child transmission of HIV/AIDS.

The reasons given for nonimportance of PIHCT includes: (1) it increases pregnant mothers stress level because they were not ready with a significant statistical association ($P=0.004$, $OR=0.139(0.036-0.540)$, $df=1$), (2) It makes them not to come to health facilities in fear of the test ($P=0.005$, $OR=0.037(0.004-0.366)$, $df=1$), (3) it distracts client-HCWs relationships 2(50%) ($P=0.030$, $OR=0.111(0.015-0.813)$, $df=1$), (4) it makes them not to give adequate information in fear of the test.

The frequency of ANC visit had no significant statistical association with acceptability to PIHCT that contradicts with the study done in Addis Ababa army hospital stated women who had better knowledge of VCT, MTCT and frequent ANC visit had significantly higher VCT acceptance than their counterparts (64). The possible reasons for this difference could be the expansion, free of charge and easily availability of ARV drugs and the study period.

The reasons for refusing HIV test were fear of stigma and discrimination, violence & divorce, severity of the disease, losing job & economic problems and 31(7.3%) refused the test as they feel healthier. The qualitative finding also supports this reasons "*most of the time we loss our hopes, we consider ourselves being an HIV positive as a challenging/devastating problem. It can also disturb the relationships of neighbors that we cannot live together in fear of the virus.*" In addition, another respondent stated, "*It can cause physical and psychological violence between wives and husbands.*" From the findings of the study, respondents who refused the test because they feel healthier 31(7.3%) was relatively a significant number, this showed that Knowledge does not necessarily bring about attitudinal change and practice of the desired behavior which contradicts with the finding (97.6%) of the respondents were

knowledgeable. The findings of this study is generally comparable with the study done in Uganda that showed the possibility of being blamed, separated or subjected to domestic violence once their husband knew they were HIV positive were their potential consequences. Among these potential consequences were abandonment by family members, violence, abuse and psychological depression (5). In Uganda, a qualitative study found that although almost all the women in their study were willing to take an HIV test and to reveal their HIV status to the maternity staff, they were anxious about the confidentiality of the results of their test. They also feared that once the maternity staff knew their serostatus, they might refuse to take care of them (57). A study conducted in Abidjan, showed pregnant mothers were also afraid of the reaction of their relatives, particularly their spouses. Some of the women did not consider pregnancy to be an appropriate time to do an HIV test (59). The main reasons given were the fear of stigma, divorce and violence (63). Cartoux made similar findings in a study in Abidjan and Burkina Faso. They found that fewer women in Burkina Faso and Abidjan (7.6% versus 22%) refused to do the test. The most common reason for their refusal was 'to seek agreement of the partner' (56). This statement is consistent with the findings of this study acceptability is highest (91.6%) when pregnant mothers were discussing with their partner.

The trusting patient-provider relationship is a primary reason for the success and failure of acceptability to PIHCT. Both HCWs and patients preferred the relationship to be positive. Some HCWs also expressed worry about the increased workload.

The trusting relationship between the HCWs and pregnant mothers were rated Very much by 191(49.1%) and much by 99(23.5%) of the respondents. This result indicated that the service given to pregnant mothers in both the hospital and health center were rewarding. Only 13(3.1%) of pregnant mothers said the relationship was not good. Mothers who trust the HCWs very much were at least four times ($P=0.001$, $OR=3.581(1.658-7.736)$) and those who trust much

were at least three times ($P=0.027$, $OR=2.670(1.116-6.385)$) more willing than those who did not trust their HCWs (See table-5).

The reasons for dissatisfaction of pregnant mothers were the HCWs refuses to hear their problems, didn't come on time, violets the rights of mothers and undermines clients (See table-5).

The percentages of mothers satisfied by the HCWs were 372(88.2%). This finding is also supported by the qualitative analysis; seven mothers explained the relationship was good regardless of the problems related to the cards. Of the positive relationships mentioned, they said, "*When we get a problem, they performed what is expected of them. They told us, what we have to do. They counsel us regarding HIV/AIDS, Nutrition, rest and other activities.*" This finding is comparable with the study done in Bahir dar indicated the majority (97.2%) of respondents said they have got understandable answers for their questions from service providers.

Satisfaction level and willingness to PIHCT have statistical significant association ($P<0.05$, $OR=4.531(2.276-9.021)$). Mothers who were satisfied with the care provided to them were almost five times more willing than those not satisfied. Further more, pregnant mothers who were highly satisfied with the care given to them were almost ten times more willing than those who were not satisfied($P=0.020$, $OR=9.190(1.1417-59.608)$) and those who were moderately satisfied were at least 8 times more willing than those not satisfied($P=0.035$, $OR=7.636(1.151-50.666)$).

The reasons of satisfaction were the HCWs accept them in warm and positive manner, explains the situation correctly and confidently, eager to hear and understand mothers problems, respecting their job & clients and come in time. Regarding the degree of satisfaction, when the HCW accepts pregnant mothers in warm and positive manner, acceptability increases about 28 times ($P=0.00$, $OR=27.5(4.772-158.471)$). This result was consistent with the same study conducted in Bahir Dar showed on respect and dignity almost all (98.1%)

respondents agreed they have got due respect and dignity from service providers(74). When the HCWs were eager to hear and understand their problems, acceptability increases by almost 16 times (P=0.00, OR=**15.714**(3.425-72.102) and when explains the situation correctly and confidently (P=0.010, OR=**6.771**(1.585-28.918)) & respecting their job and clients (P=0.008, OR=**6.691**(1.629-27.492)) acceptability increases about 7 times than those who were not satisfied. A similar study revealed getting information if the condition worsens 409(96.9%) had said they have got the necessary explanation from the service providers if the problem worsens (74).

Among the reasons of dissatisfaction; (1) HCWs disclose the secrets of their clients to others, (2) HCWs knew pregnant mothers and disclose their secrets to others, (3) mothers didn't know that HCWs keep the secrets of their clients confidential. From the qualitative analysis, seven respondents complained, *"Previously cards were easily obtained in the MCH clinic; we can get them easily. But this time, cards were transferred to the card room. It is difficult to get them. We were asked to pay for the card that previously not present. This had created a problem to us because we become easily tired and can't stop for longer time. Further more we may be exposed to different communicable diseases while we were struggling with other patients who were infected with communicable disease. So we need the cards to be returned to the MCH clinic as before."* One mother said, *"the relationship was not good. They look us angrily with a frowning face. We need them to show us a smiling face. They did not treat all clients fairly. They showed impartiality between us. They appointed us frequently and not found on their jobs. I stayed longer time in this health center waiting for them."* This finding is almost comparable with the study done in Jijjiga that stated unclarity of the counseling, lack of privacy, no warm reception, unavailability and no link to care and support, lack of confidentiality and expensiveness of fees were the reasons (32). The other most important concern of satisfaction was competence of the counselor and confidentiality of test results. The majority of respondents 79% preferred confidential testing

(72). Similarly 70% study participants in Gonder and 74.3% in Jijjiga town want for confidential testing which was comparable with (32, 73). The recommended remedy for unhealthy relationship between the HCWs and pregnant mothers were training of the HCWs to improve the service.

5.7 CONCLUSION:

In this study, acceptability of pregnant mothers to PIHCT revealed a significant result. The overall acceptability rate was 87.7%. The study gives useful information to health care providers to introduce measures that could improve the utilization of antenatal HIV testing.

- The sociodemographic characteristics of respondents did not have significant statistical association with acceptability to PIHCT. The study showed as age increases acceptability to PIHCT increases because responsibility to the family and the value for life increases.
- The majorities (97.6%) of the respondents were knowledgeable regarding methods of prevention of the virus (i.e. Abstinence, avoiding multiple sexual partners & sharing sharps) but low results (35.8%) were obtained on the methods of transmission of HIV from mother to child during (Pregnancy, child birth & breast feeding).
- Risk perception to HIV/AIDS was considered to be low.
- Acceptability was highest in those who discuss with their partner. So partner involvement is important than any other family members.
- Sex of the counselor, the counseling room and frequency of ANC visit had no influence on acceptability to PIHCT.
- Mothers who were given pre-test counseling were more willing than those not counseled. The majority of the respondents agreed on the importance of PIHCT. Health workers were the most common sources of information but religious leaders and media played little role in the dissemination of PIHCT.

- Fear of stigma and discrimination, violence & divorce, severity of the disease, losing job & economic problems and feeling of healthier were factors that determined HIV testing.
- Client-provider relationships were the pivotal point for the success of acceptability to PIHCT. There is an indication that women's acceptance of HIV test seemed to depend on their view that provision of and access to antiretroviral drugs provide benefit for both the child and themselves. Therefore it is believed that improving the accessibility and affordability of ARVs to HIV positive individuals and encouraging couple counseling could significantly increase the up take of PIHCT services.

5.8 Recommendation

From the results of the study,

- Mothers who discussed with their partner were more willing (91.6%) to PIHCT than any other family members and HCWs. So partner involvement should be emphasized and encouraging couple counseling could significantly increase the up take of PIHCT
- Religious leaders and media had played little role. So it is better to improve participation of religious leaders and media.
- Pre-test counseling should be emphasized that dramatically improved acceptability.
- Almost all respondents had knowledge of HIV/AIDS. But there was problem of attitude and practice. So it is best if strategies would be designed on change of attitude and practice.
- The integration of PIHCT into routine antenatal care services nationwide should be given due attention.
- Acceptability highly increases when the relationship between the HCWs and pregnant mothers were good. So it is very important to improve this relationship by providing continuous training of the HCWs.

5.9 Strengths and Limitations

5.9.1 Strength

- ✓ The sample size was representative of the total population
- ✓ Intensive training and close supervision of data collectors were performed accordingly.
- ✓ The study includes both quantitative and qualitative analysis.
- ✓ Data collection was carried out by same sex (Female Nurses) who were not counselors in both the hospital and the health center to avoid biases.
- ✓ The HIV status of the mothers were not asked to avoid breach of information
- ✓ Additional time was taken than planned for data collection
- ✓ Data completeness was assessed daily to avoid missing of questions
- ✓ Questionnaires were translated into different local languages (Oromiffaa and Amharic)

5.9.2 Limitation

- Since the study was cross-sectional, it lacks to show the subsequent pattern of quality of services and satisfaction of women.
- The study lacks to include the HIV serostatus of the women.
- Lack of sufficient references as it is a new concept.

REFERENCES

1. Federal HIV/AIDS Prevention and Control Office, Guidelines for HCT in Ethiopia, Federal Ministry of Health July 2007, 1-27.
2. USAID/Synergy. Women's Experiences with HIV Serodisclosure in Africa: Implications for VC and PMTCT. Meeting Report. Washington DC: USAID, March 2004, 14-16.
3. WHO. Cidsase Definitions of HIV for Surveillance and Revised Clinical Staging and Immunological Classification of HIV-Related Disease in Adults and Children. Geneva: WHO, 2006 2-4.
4. Bulterys M. et al. Rapid HIV testing during labour: a multicenter study. *JAMA*. 2004, 292:219-223.
5. The Public Health Agency of Canada, HIV testing and counseling policy in transition? International Public Health Dialogue on HIV CT Toronto, August 17, 2006
6. Canadian HIV/AIDS Legal Network Outcome of the symposium on HIV testing and Human Rights Montreal October 2005, 24-25.
7. UNAIDS/WHO. AIDS epidemic update. Geneva: UNAIDS and WHO; December 2006.
8. Mukherjee JS, Farmer PE, Niyizonkiza D, McCorkle L, Vanderwarker C, Teixeira P, Kim JY. Tackling HIV in resource poor countries. *BMJ*. 2003; 327:1104–1106. doi: 10.1136/bmj.327.7423.1104. [PubMed]
9. Paxton S et al. AIDS-related discrimination in Asia. *AIDS Care*, 2005, 17(4):413-24.
10. Lawn SD, Myer L, Orrell C, Bekker LG, Wood R: Early mortality among adults accessing a community-based ARV service in SA: implications for programme design.
11. Coetzee D, et al. Outcomes after two years of providing ARVT in Khayelitsha, SA. *AIDS*. 2004;18:887–895. doi: 10.1097/00002030-200404090-00006. [PubMed]
12. Orrell C, Bangsberg DR, Badri M, Wood R. Adherence is not a barrier to successful ART in South Africa. *AIDS*. 2003;17:1369–1375. doi: 10.1097/00002030-200306130-00011. [PubMed]
13. WHO/UNAIDS, Guidance on PIHCT in health facilities. WHO, 20 Avenue Appia, 1211 Geneva 27, Switzerland (tel.: +41 22 791 3264; fax: +41 22 791 4857; e-mail: bookorders@who.int).
14. Dabis F, Schechter M, Egger M. Mortality of HIV-1-infected patients during the first year of potent antiretroviral therapy: comparative analysis of databases from low- and high income countries. *Lancet* 2006, 367:817-24.
15. Sahlu T et al. Sexual behaviors, perception of risk of HIV infection, and factors associated with attending HIV post-test counseling in Ethiopia. *AIDS*. 1999, 13(10):1263-72.

16. Stein JA, Nyamathi A. Gender differences in behavioral and psychosocial predictors of HIV testing and return for test results in a high-risk population. *AIDS Care*. 2000, 12(3):343-56.
17. Obermeyer C Makhoulouf, M Osborn. The uptake of testing and counseling for HIV: A review of the social and behavioral evidence. *American Journal of PH* (in press)
18. UNAIDS. 2006 Report on the global AIDS epidemic. A UNAIDS 10th Anniversary Special Edition. Geneva: UNAIDS; May 2006 URL: http://www.unaids.org/en/HIV_data/2006GlobalReport/default.asp 3 Directorate: Epidemiology and Surveillance, Department of Health. National HIV and Syphilis prevalence survey. Pretoria: Department of Health; 2005.
19. Sherer R. Physician use of the HIV antibody test. The need for consent, counseling, confidentiality, and caution. *JAMA* 1988; 259:264-5. 2001.
20. WHO: The right to know: new approaches to HIV testing and counseling. 2003.
21. WHO/UNAIDS: UNAIDS/WHO policy statement on HIV testing. 2004.
22. Ginwalla SK, Grant AD, Day JH, Dlova TW, Macintyre S, Baggaley R, Churchyard GJ. Use of UNAIDS tools to evaluate HIV VCT services for mine workers in *AIDS Care*. 2002;14:707-726. doi:10.1080/0954012021000005533. [PubMed]
23. Nakanjako D et al. Acceptance of Routine Testing for HIV among Adult Patients at the Medical Emergency Unit at a National Referral Hospital in Kampala, Uganda. *AIDS and behavior*. 2006, (Epub ahead of print).
24. Op. cit. number 8
25. Gary M et al. Estimating sexual transmission of HIV from persons aware and unaware that are infected with the virus in the USA. *AIDS*. 2006, 20(10):1447-1450.
26. Centers for Disease Control and Prevention. Voluntary HIV testing as a part of routine medical care. *Morbidity and Mortality Weekly Report* 2004 53: 523-526.
27. Simpson WM et al. Uptake and acceptability of antenatal HIV testing: randomised controlled trial of different methods of offering the test. *BMJ*. 1998, 316(7127):262-7.
28. Op. cit. number 18
29. Sigxaxhe T, Matthews C. Determinants of disclosure by HIV positive women at Khayelitsha mother-to child transmission pilot project. In XIII International AIDS Conference, 9-14, July 2000, Durban, South Africa; 2000: 209
30. M F Chersich et al HCT for women attending child health clinics: an opportunity for entry to PMTCT and HIV treatment International Centre for RH, Mombassa, Kenya; †Department of Obs and Gyn, Ghent University, Ghent, Belgium; ‡Coast Provincial General Hospital, Mombassa, Kenya.
31. International Centre for RH, Mombassa, Kenya; †Department of Obs and Gyn, Ghent University, Ghent, Belgium; ‡Coast Provincial Gene Hospital, Mombassa, Kenya

32. Yimam.Z. Determinants of VCT Utilization among Youth in Jijjiga Town. Addis Ababa University Masters thesis, July 2003 Ethiopia.
33. USAID, UNAIDS, WHO, et al. Coverage of selected services for HIV/AIDS prevention, care and support in low and middle income countries in 2003. Washington, D.C.: The Futures Group, 2004.WHO. The right to know: new approaches toHCT.Geneva:WHO,2003.Availablefrom:URL:ttp://www.emro.who.int/ASD/backgrou nddocuments/egy0703/RighttoKnow.pdf
34. McDonald EA, Currie MJ, Bowden FJ. Delayed diagnosis of HIV: missed opportunities and triggers for testing in the Australian Capital Territory. *Sexual Health*. 2006, 3(4): 291-295.
35. Department of Epidemiology, School of Public Health, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina 27599, USA. vanrie@email.unc.edu
36. D. MILLER, A. et al. The Gateway to Treatment: An increased role for PIHCT in resource-poor settings, PIHCT WHO department of HIV/AIDS.
37. WHO/UNAIDS: UNAIDS/WHO policy statement on HIV testing. 2004.
38. Ginwalla SK, Grant AD, Day JH, Dlova TW, Macintyre S, Baggaley R, Churchyard GJ. Use of UNAIDS tools to evaluate HIV VCT services for mineworkers in South Africa. *AIDS Care*. 2002; 14:707–726. doi: 10.1080/0954012021000005533. [PubMed]
39. Msellati P, Juillet-Amari A, Prudhomme J, Akribi HA, Coulibaly-Traore D, Souville M, Moatti JP, Cote d'Ivoire HIVDAISBEG. Socio-economic and health characteristics of HIV-infected patients seeking care in relation to access to the Drug Access Initiative and to ARV treatment in Cote d'Ivoire. *AIDS*. 2003; 17 Suppl 3:S63–8. [PubMed]
40. Steen TW et al. Two and a Half Years of Routine HIV Testing in Botswana. *Journal of AIDS*. 2007, 44(4):484-8.
41. Op. cit number 24
42. Medley A et al. Rates, barriers and outcomes of HIV serostatus disclosure among women in developing countries: implications for PMTCT programmes. Geneva: Bulletin of the WHO. 2004, 82(4): 299-307.
43. Maman S et al. High rates and positive outcomes of HIV-serostatus disclosure to sexual partners: Reasons for cautious optimism from a VCT clinic in Dar es Salaam, Tanzania. *AIDS and behavior*. 2003, 7(4):373-82.
44. Gielen AC et al. Women's lives after an HIV-positive diagnosis: disclosure and violence. *Maternal and Child Health Journal*, 2000, 4(2):111-20.
45. Gaillard P et al. Vulnerability of women in an African setting: Lessons for PMTCT programmes. *AIDS*. 2002, 16(6):937-9. 54

46. Semraua K et al. Women in couples antenatal HIV CT is not more likely to report adverse social events. *AIDS*, 2005, 19:603–609.
47. Passin WF et al. A systematic review of HIV partner counseling and referral services: client and provider attitudes, preferences, practices, and experiences. *STD*. 2006, 33(2):1-9.
48. Op. cit. number
49. USAID/Synergy. Women's Experiences with HIV Serodisclosure in Africa: Implications for VC & PMTCT. Meeting Report. Washington DC: USAID, March 2004.
50. D.Jerene^{1,2}, A. Endale² and B. Lindtjørn¹ Acceptability of HIV CT among Tb patients in south Ethiopia 1 Centre for International Health, University of Bergen, Norway 2 Arba Minch Hospital, Ethiopia
51. Joint United Nations Programme on HIV/AIDS (UNAIDS), WHO. (2006) AIDS epidemic update: December 2006. Geneva: UNAIDS/WHO.
52. UNAIDS/OHCHR International Guidelines on HIV/AIDS & Human Rights. Available from: URL: <http://www.unaids.org/EN/other/functionalities/document.asp> 2002.
53. Andia I. Evolving Clinical Picture Secondary to Routine HIV Testing and Early Linkage to Care at the HIV Clinic at Mbarara Regional Referral Hospital. PEPFAR Implementers Meeting, Durban, South Africa, June 12-15, 2006 (Abstract 195).
54. Statistical Abstract of FDR Ethiopia, CSA, December 2004, Addis Ababa, Ethiopia.
54. Health and Health Related Indicators, 1997E.C (2004/05G.C), Planning and Programming Department, FMOH, Ethiopia.
55. MOH. AIDS in Ethiopia: Fifth Report, June 2004.
56. Cartoux M, Msellati P, Meda N, et al. Attitude of pregnant women towards HIV testing in Abidjan, Cote d'Ivoire and Bobo Dioulasso, Burkina Faso. DITRAME study group 9 (ANRS 049 Clinical Trial). Diminution de la transmission mere enfant du VIH. Agence Nationale de Recherches sur le SIDA. *AIDS*. 1998;12:2337–2344. [[PubMed](#)]
57. Pool R, Nyanzi S, Whitworth JA. Attitude to VCT for HIV among pregnant women in rural south-west Uganda. *AIDS Care*. 2001;13:605–615. [[PubMed](#)]
58. Coulibaly D, Msellati P, Dedy S, Wellfens-Ekra C, Dabis F. Attitude and behaviour of pregnant women towards HIV screening in Abidjan (Ivory Coast) in 1995 and 1996. *Sante*. 1998;8:234–238. [[PubMed](#)]
59. Cartoux M, Meda N, Van de Perre P, et al. Acceptability of VCT by pregnant women in developing countries: an international survey. Ghent international working group on MTCT of HIV. *AIDS*. 1998;12:2489–2493. [[PubMed](#)]

60. Wilkinson D, Wilkinson N, Lombard C, et al. On-site HIV testing in resource poor settings: is one rapid test enough? *AIDS*. 1997;11:377–381. [[PubMed](#)]
61. Fyllkesnes K, Haworth A, Rosensvard C, Kwapa PM. HIV CT: overemphasizing high acceptance rates a threat to confidentiality and the right not to know. *AIDS*. 1999;13:2469–2474. [[PubMed](#)]
62. Kilewo C, Massawe A, Lyamuya E, et al. HIV CT of pregnant women in sub-Saharan Africa-Experiences from a study on PMTCT of HIV-1 in Dar es Salaam, Tanzania. *J Acquir Immune Defic Syndr*. 2001;28:458–462. [[PubMed](#)]
63. Baiden F, Remes P, Baiden R, Williams J, Hodgson A, Boaleart M, Buve A. VCT for pregnant women in the Kassena-Nankana district of northern Ghana: Is couple counselling the way forward? *AIDS Care*. (in press).
64. Worku G, Enquesslassie F. Factors determining acceptance of VCT among pregnant women attending ANC. National defense force University college at Army hospital. AA, Ethiopia.(2007).
65. Jammeh, Abdou. Acceptability of VCT for HIV among Pregnant Women. Western Health Division, the Gambia (2007).
66. Maedot P, Haile A, Lulseged S, Belachew A. Determinants of VCT uptake among pregnant women attending two ANC clinics in Addis Ababa city unmatched case control study. JHPIEGO Ethiopia, P.O Box-2881 Code 12 50, AA, Ethiopia. (2005).
67. Cartoux M, Meda N, Van de Perre P, Newell ML, de Vincenzi I, Dabis F. Acceptability of VCT and interventions to reduce MTCT of HIV in Africa. Ghent Working Group. Institute of Child Health London, United Kingdom. London. 1998.
68. Melaku.M.D. Assessment of VCT utilization and willingness to PIHCT among TB patients in Addis Ababa. Public health department. Addis Ababa. Ethiopia. 2007.
69. Demissie M, Lindtjom B, Tegbaru B. Human immunodeficiency virus (HIV) infection in TB patients in Addis Ababa. Ethiopia. *J.health Dev*. 2000.
70. Allen E. HIV testing and Condom use in Africa. *JAMMA* 1992; 268:3338:3343
71. Knut Fylkesnes, Seter Siziya. A Randomized Trial on Acceptability of Voluntary HIV Testing. *Tropical Medicine and International Health* 2004.
72. Yemane A. Willingness of Pregnant Woman Attending ANC Towards VCT Community Health Department. Addis Ababa, Ethiopia. 2006
73. Alemu S, Abseno N, Degu G, Wondmkun Y, Amsalu S. Knowledge and attitude Towards VCT. A Community Based study in North West Ethiopia. *EJHD*, Gonder. 2004.
74. Almaz T. Assessment of Quality of ART Service in Felege Hiwot Hospital. AAU. Ethiopia. 2008

Annex-I

Information sheet

**ADDIS ABABA UNIVERSITY FACULTY OF MEDICINE, DEPARTMENT OF
CENTRALIZED SCHOOL OF NURSING**

Information sheet

Here, I the undersigned, at Addis Ababa University Medical Faculty centralized school of Nursing Graduate studies Program, currently I will be undertaking research on a topic entitled Acceptability of provider initiated HIV counseling and testing in pregnant mothers attending ANC at Nekemte town government health facilities, East Wollega zone, Nekemte, Ethiopia.

For this study, you will be selected as a participant and before getting your consent or permission of your participation, you need to know all necessary information related to the study. Thus, this information will be detailed as;

Purpose of the study

The purpose of the study is to assess the proportion of willingness, perceived barriers and the relationship between pregnant mothers and the HCW for acceptability of provider initiated HIV counseling and testing at Nekemte hospital and health center.

Participants to be included

All pregnant mothers who will be presented for ANC at Nekemte government health facilities during the study period and are voluntary to participate in the study are included.

Risks and Benefits of the study

Risks: The study will be carried out simply by asking you, the already prepared and structured questions. The procedure doesn't bear any physical or psychological trauma. Furthermore, you will not be forced to respond to the information you do not know.

Benefits: For your participation in the study no payment will be granted or has no any special privilege to you. On the other hand, participating in the study and giving your information to questions asked will have great input in efforts at preventing HIV\AIDS.

Confidentiality: All information you give will be kept confidential and won't be accessible to any third party. Your name won't be registered on the question sheet so that you will not be identified.

Consent: Your participation in the study will be totally based on your willingness. You have the right not to participate from the beginning, or stop any time after starting participation. You will not be forced to respond to the information you do not know.

Finally, I would like to acknowledge you for your either responses.

Name of PI-----Sign-----Date-----

IRB Contact Address

Tel: 0115538734

E-mail: aaumfirb@yahoo.com

Annex II

Consent form

**ADDIS ABABA UNIVERSITY FACULTY OF MEDICINE, DEPARTMENT OF
CENTRALIZED SCHOOL OF NURSING**

Consent form to certify the respondents agreement for the interview

Assessment of the proportion of willingness, perceived barriers and the relationship between pregnant mothers and the HCW for acceptability of provider initiated HIV counseling and testing at Nekemte hospital and health center.

Introduction

1. Questionnaire identification number-----
2. Name of interviewer -----

I am a member of the research team. I will request you to listen carefully to what I am going to read about the purpose and general condition of the study and tell me whether you agree or disagree to participate in this study.

Consent form

The purpose of this study is to assess the proportion of the willingness, perceived barriers and the trusting relationship between pregnant mothers and the HCW for acceptability of provider initiated HIV counseling and testing at Nekemte hospital and health center. You are selected to be one of the participants in the study. The study will be conducted through interview. The information you give us is confidential and will be used only for study purpose. A code number will identify every participant and no names will be used. If a report of the result is published, only summarized information of the total group will appear.

The interview is voluntary, you have the right to participate, or not to participate or refuse to do so at any time during the interview. Your refusal will not have any effect on services that you or any member of your family receives. However, your participation is important to fulfill the study and design

Annex III- QUESTIONNAIRE

Structured English version Questionnaire

**ADDIS ABABA UNIVERSITY FACULTY OF MEDICINE, DEPARTMENT OF
CENTRALIZED SCHOOL OF NURSING**

Part-ONE Sociodemographic variables

1. Age-----

2. RELIGION

- Protestant
- Orthodox
- Muslim
- Catholic
- Other (specify)

3. ETHNICITY –

- Oromo
- Amara
- Tigray
- Gurage
- other (specify)

4. Marital status

- Married
- Unmarried
- Divorced
- Widowed

5. Educational status

- Illiterate
- Primary
- Secondary
- College and above

6. OCCUPATION

- House wife
- Daily Laborer
- Merchant

- Student
- House maid
- Government employer
- Other

7. Average monthly Family income (specify) -----

8. Family size -----

9. Gravida----- Number of children alive-----

PART two- acceptability variables

2.1 Questions related to willingness of pregnant mothers to PIHCT

1. Is this pregnancy planed and wanted?
a) yes----- b) No-----
2. How can people protect themselves from getting HIV/AIDS?
 - a) Abstinence
 - b) Avoiding multiple sexual partnership
 - c) Avoiding sharing sharps
 - d) Avoiding mosquito bites
 - e) Avoiding physical contact
 - f) Avoiding eating together
 - g) Avoiding living together
 - h) Other (specify)
3. Can HIV infected woman living with HIV/AIDS transmit the disease to her child during
 - a) Pregnancy
 - b) Child birth
 - c) Breast milk
 - d) I don't know
 - e) No response
4. What are the interventions which can reduce mother to child transmission?
 - a) Avoiding breast feeding
 - b) Antiviral drugs
 - c) Other (specify)
 - d) I don't know
 - e) No response
5. With whom, you discuss about prevention of HIV/AIDS?

- c) He/she doesn't come on time
 - d) He/she undermines us
 - f) Other (specify) -----
4. If the relationship between you and your HCW is not good, how it would be corrected?
- a) Dismissal of the HCW
 - b) Training of the HCW
 - c) Replacing the HCW with other HCWs
 - d) Other (specify) -----
5. If the HCW asked you to be tested and you accepted the test, have you satisfied with the care given to you?
- a) Yes
 - b) no
6. If your answer is **yes**, how much you were satisfied?
- a) Highly
 - b) moderately
 - c) fairly
7. Do you trust the HCW that he/she can keep your information confidential?
- a) Yes
 - b) no
8. If your answer for question **no-7** is **yes**, how much would you trust him/her?
- a) Very much
 - b) much
 - c) somehow
 - d) little
9. If your answer for question **no-7** above is **no**, what is your reason? (You can tick more than once)
- a) He/she know me and can tell to others
 - b) I heard that HCWs disclose the secrets of their patients
 - c) I didn't know that HCWs keep the secrets of their patients
 - d) Other (specify) -----

Qualitative questions

1. How did you consider yourself at risk of HIV/AIDS?
2. Did the health care worker ask you to be tested for HIV/AIDS?
3. If the HCW didn't ask you have you been asked him to be tested?
4. Are you willing to be tested for HIV/AIDS?
5. If you are not willing to be tested what are your reasons?
6. If you didn't ask him, mention your reasons
7. Have you heard of the presence of PIHCT?
8. Is PIHCT important for pregnant mothers?
9. How was the trusting relationship between you and your HCW?
10. What would you do if the HCW forced you to be tested for HIV/AIDS?

Waraqaa Odeeffannoo

Ani yuniversitii Finfinneetti Medikal Fakulti kutaa mana barumsaa Narsootaatti qorannoo fedhii haadholii, rakkinootaafi wal-amanamtummaa hojjetaa fayyaafi haadholii ulfaa gidduu jiru kaka'umsa hojjetaa fayyaatiin qorannoo HIV/AIDS hospitaala Naqamtee fi buufata fayyaa Naqamteetti gaggeessaan jira.

Qorannoo kanaaf isin filatamtaniittu. Kanaafuu, eeyyama keessan argachuu koo durseeodeeffannoo ga'aa argachuu qabdu. Innis, akka armaan gaditti ibsame ta'a.

Kaayyoon qorannichaa

Fedhii haadholii, rakkinootaafi wal-amanamtummaa hojjetaa fayyaafi haadholii ulfaa gidduu jiru kaka'umsa hojjetaa fayyaatiin qorannoo HIV/AIDS hospitaala Naqamtee fi buufata fayyaa Naqamteetti gaggeessuu ta'a.

Namoota Qoranicha irratti himaatan

Hadholiin ulfaa yeroo qorannoon kun gageeffamu gara mana yaala Naqamteefi Buufata fayyaa Naqamtee qoranno ulfaaf ilaalamuu kan dhufan hunduu fedha isaanittin hirmaachuu nidanda'u.

Midhaafi Bu'aa qorannichaa

Miidhaa

Qorannichi kan gaggeeffamu gaaffiif deebii qofaan waan ta'eef miidhaa qamaas ta'e sammuu keessan irratti waan fidu hin jiru. Akkasumas, odeeffannoo isin hin beekne irratti deebbi laachuuf hin dirqisiisamtan.

Bu'aa

Qorannoo kana kessatti hirmachuu keessaniif kaffaltiin isinii kennamu hin jiru. Karaa biraa garuu qorannoo kana keessatti hirmaattanii odeeffannoo kennuun keessaan HIV/AIDS tamsaasa isaa xiqqeessuu keessatti iddoo guddaa qaba.

Odeeffannoon isin laattan eenyutti iyyuu darbee saaxila hin ba'u. Maqaan keessan qorannoo kana keessatti hin barreeffamu.

Mallattoo Eeyyamaa

Qorannoo kana keessatti himaannaan keessan fedha keessan duwwaa irratti murtaa'a. Qorannoo kana keessatti hirmaachuufis ta'e dhiisuuf mirga qabduu. Gaaffii hin beekne deebisuuf hin dirqisiisamtan.

Dhuma irratti cimseen isin galateeffachuun barbaada.

Galatoomaa.

Maqaa.....qorannoogaggeessaa.....Mallattoo.....Guyyaa.....

GAAFFILEE

Gaaffilee Afaan Oromootiin Qophaa'e

Yuniversity Finfinnetti kutaa giddugaleessa Narsiingii.

Waliigaltee deebii laattuu mirkaneessu

Kaayyoon qorannoo kanaa fedhii haadholii, rakkinootaafi wal-amanamtummaa hojjetaa fayyaafi haadholii ulfaa gidduu jiru kaka'umsa hojjetaa fayyaatiin qorannoo HIV/AIDS hospitaala Naqamtee fi buufata fayyaa Naqamteetti gaggeessuu ta'a.

Seensa

1. Lakkofsa (kooddii) gaaffilee gargar baasan-----
2. Maqaa gaafattuu -----

Ani miseensa qorannoo kanaati. Gaaffiilee ani siidubbisuu (sigaafadhuufi) sirritti erga na'aggeeffattee booda, kaayyoon qorannichaas erga siigalee booda deebii laachuufi dhiisuu kee natti himta.

FOORMII WALIGALTEE

Kaayyoon qorannoo kanaa fedhii haadholii, rakkinootaafi wal-amanamtummaa hojjetaa fayyaafi haadholii ulfaa gidduu jiru kaka'umsa hojjetaa fayyaatiin qorannoo HIV/AIDS hospitaala Naqamtee fi buufata fayyaa Naqamteetti gaggeessuu ta'a.

Ati namoota qorannoo kana keessatti hirmaatan keessaa ishee tokkoo. Odeeffannoon ati nuuf kennitu saaxilummaan isaa eegamaadha. Akkasumas odeeffannoon ati nuuf laattu qorannoo kana duwwaaf waan ooluuf maqaan kee asirratti hin barreeffamu. Deebbiin kees kan kee ta'uu isaa eenyu iyyuu hin beeku. Deebbiin kee lakkofsa duwwaan gargar ba'a. yoo qorannoon kun maxxansama ta'e odeeffannoo atiif haadholiin biraa kennan walitti qabaa isaatu barreeffama.

Gaaffilee kana keessatti fedhii keetiin hirmaachuufi dhiisuu nidandeessa. Diduun kee sirratis ta'e maatii kee irratti mana yaalaa kana keessatti yaalamuuf rakkina tokko iyyuu isin irratti uumu hin jiru. garuu deebbiin (odeeffannoon) ati nuuf kennitu qorannoo kana iddoon ga'uuf murteessaadha.

Galatoomaa.

Yoo deebii laattuu wajjin waligaltan gaaffif deebii itti fufuu ni dandeessu.

1. Qorannoo kana keessatti himaachuuf fedha qabdaa?
 - a) eeyyee
 - b) hinqabu
2. Maqaa nama gaaffilee waliigaltee kana guutee
 - a) Maqaa -----Mallattoo-----
 - b) koddii-----

c) Guyyaa----- Ji'a-----2009

3. bu'aa

- a) Gaaffileen hunduu sassaabamaniiru
- b) Deebii laattuun nididde
- c) Gaaffilee walakkaan sassaabamaniiru
- d) Garabira (ibsii)

4. Nama mirkaneesse

Maqaa----- Mallattoo-----Guyyaa-----

Hubadhu: Deebii laattuu dirqsiisuun dhorkaadha.

KUTAA TOKKOFFAA

Gaaffilee Sociodemographics

1. Umurii-----

2. . Amantaa:

- Protestaantii
- -Ortoodoksii
- -Musliima
- -Kaatoliki
- -Garabiraa (ibsii) -----

3. Sablammummaa-

- Oromoo
- -Amaara
- -Tigiree
- -Guraagee
- -Garabiraa(ibsii) -----

4. **Haala Gaa'elaa** –

- Heerumteetti
- -Hinheerumine
- -Hiikteetti
- -Abbaan manaa du'eera
- -Garabiraa (ibsii) -----

5. **Haala barumsaa-**

- ❖ Hin baranne
- ❖ -Barumsa jalqabaa qabdi
- ❖ -Barumsa sadarkaa lammaffaa qabdi

❖ -Barumsa kolleejjii qabdi

6. **Haala Hojii –**

- -Haadha mana
- -Hojjettuu guyyaa
- -Daldaaltuu
- -Barattuu
- -Hojjettuu mana namaa
- -Hojjettuu mootummaa
- -Garabiraa (ibsii) -----

7. **Galii ji'aa maatiin ishee argatan-----**

8. **Baa'ina maatii –**

- ≤ 5
- 6-10
- ≥ 10

9. Baayina ulfaa----- kan deesse----- Baayina ijoollee lubbuun jiran----

KUTAA LAMMAFFAA

2.1 Gaaffiilee fedhii haadhooliin ulfaa qorannoo dhiigaa kaka'umsa hojjetaa fayyaan godhachuuf qaban

1. Ulfi kun fedha keessaniif yeroo barbaaddanittii kan ulfaa'ame?
 - a) Eeyyee
 - b) Miti
2. Namoonni akkamitti HIV/AIDS irraa of eegu jette yaadda?
 - a) Wal-quunnamtii saalaa irraa of eeguun
 - b) Hiriyyaa baa'ee qabaachuu irraa of eeguun
 - c) Meeshaalee qaraba'aa ta'an walliin gargaaramuu irraa of eeguun
 - d) Ciniinnaa busaa irraa of eeguun
 - e) Namoota HIV/AIDS qaban qaama isaanii tuquu dhaabuun
 - f) Namoota HIV/AIDS qaban wajjin nyaachuu dhiisuun
 - g) Namoota HIV/AIDS qaban wajjin rafuu dhiisuun
 - h) Garabiraa (ibsi)
3. Haadhooliin ulfaa HIV/AIDS wajjin jiraatan akkamitti mucaa isaanitti dabarsuu danda'u?
 - a) Yeroo Ulfaa
 - b) Yeroo Da'umsaa
 - c) Yeroo Harma Hoosisan
 - d) Hin beeku
 - e) callisuu

4. Wantootni HIV/AIDS haadha irraa gara mucaatti akka hin dabarre godhan maalfaadha?
- a) Harma hoosisuu dhaabuu b) Qoricha lubbuu dheeressan fudhachuu
c) Hin beeku d) Callisuu e) Garabiraa
5. Akkaataa HIV/AIDS of irraa eeguu danda'an eenyu wajjin mari'atta?
- a) Abbaamanaakoo b) Abbaakoo c) Haadhakoo d) Obboleettiikoo
e) Obboleessakoo f) Hojjetaa Fayyaa g) Garabiraa (ibsi)
6. Hangam HIV/AIDS tiif saaxila ba'eera jette yaadda?
- a) Xiqqoo b) Gidduugaleessa c) Guddaa d) Hin beeku
e) Saaxila hin bane
7. HIV/AIDS tiif saaxila ba'eera jettee yaadda yoo ta'e, sababin isaa maalii?
- a) Hiriyyaa bay'een qaba ture
b) Wal-qaannamtii saalaa kondomiin ala gochaan ture
c) Abbaa manaa koon shakka
d) Qaraba'aa qulqullumaan isaa hin eegamneen gargaarameen ture
e) Nama HIV qabu wajjin wal-quunnamtii saalaa godheen ture
f) Meeshaalee aadaa qulqullumaan isaa hin eegamneen gargaarameen ture
g) Garabiraa (ibsi)
8. Kanaan dura yoo hin qoratamnee ta'e, amma qoratamuu nibarbaaddaa?
- a) Eeyyee b) Hin barbaadu
9. Hojjetaan fayyaa qorannoo dhiigaa akka godhattu sigaafatee turee?
- a) Eeyyee b) Hin gaafanne
10. Yoo hojjetaan fayyaa si hingaafanne ta'e, ati qorannoo dhiigaa godhachuuf hojjetaa fayyaa gaafatteettaa?
- a) Eeyyee b) Hin gaafanne
11. Akka yaada keetti, namoonni yoom qorannoo dhiigaa godhachuu qabu?
- a) Yeroo kamiyyuu
b) Yeroo baay'ee dhukkubsatan
c) Yeroo mallatoo dhukubaa agarsiisu
d) fuudhaafi heeruma dura
e) garabiraa (ibsi) -----
12. Hojjetaan fayyaa gorsa qorannoo dhiigaa dura siif kenneeraa?
- a) Eeyyee b) Lakki

13. Fedha kee ala hojjetaan fayyaa tokko qorannoo dhiigaa akka godhattu yoo sidirqisiise maal goota?

- a) Lamuu mana yaalaa kana hindhufu
- b) Waanan godhu hin beeku
- c) Waan hojjetaan fayyaa natti hime gammachuun nanfudha.
- d) Yoo nadirqisiisee iyyuu hin fudhadhu.
- e) Garabiraa (ibsii).....

14. Qoranno dhiigaa godhachuuf dubartiin ulfaa tokko dirqisiisamuu qabdi jette yaaddaa? a) Eeyyee b) Lakki

2.2 Gaaffiilee qorannoo dhiigaa godhachuuf gufuu ta'an

1. Kaka'umsa hojjetaa fayyaan qorannoon dhiigaa akka godhamu ageessee beektaa?

- a) Eeyyee
- b) Lakki

2. Yoo ageessee beekta ta'e, eessaa ageesse?)

- a) Hojjetaa fayyaa irraa
- b) Hiriyyaa koo irraa
- c) Raadiyoofi talavizona irraa
- d) Abbootii amantaa irraa
- e) Garabiraa (ibsi)

3. Kaka'umsa hojjetaa fayyaan qorannoon dhiigaa godhachuun bu'aa qaba jettee yaaddaa?

- a) Eeyyee
- b) Lakki

4. yoo deebbbin kee "Lakki" ta'e, sababni isaa maali?(Deebbiin tokkoo ol nidanda'ama)

- a) Ijaa itti hin qophooneef nayaddressaa.
- b) Qorannoo dhiigaa akkan godhadhu hojjetaan fayyaa nagaafata jedhee waanan sodadhuuf gara mana yaalaa dhufuu nadhowwa.
- c) Odeeffannoo ga'aa akka hin laanne nagodha.
- d) Waligaltee hojjetaa fayyaafi haadholii gidduu jiru balleessa.I
- e)Garabiraa(ibsi)

5. Kaka'umsa hojjetaa fayyaan qorannoon dhiigaa godhachuun faayidaan isaa maalii?

- a) Haadholii akka qorannoo dhiigaa godhatan kakasa
- b) Akka of beekan godha
- c) HIV/AIDSiin hadha irraa gara mucaatti akka hin dabarre godha.
- d) Garabiraa

6. Kutaa hojjetaan fayyaa keessatti gorsa kennu akkamitti ilaalta?

- a) Gaariidha b) Gaarii miti c) Callisuu
7. Hojjetaan fayyaa gorsa qorannoo dhiigaa kennu saalli isaa maal ta'uu qaba?
a) Dhiira b) DHalaa c) Saalli kam'iyyuu rakkina hin qabu.
8. Kanna dura qoranno dhiigaa godhattee beekta yoo ta'e, eenyutu akka qoratamtu sitti hime?
a) Hojjetaa fayyaa
b) Ana mattakoo
c) Hiriyyaakoo
d) Abbaamanaakoo
e) Abbootii amantaa
f) Garabiraa (ibsi)
9. Kanna dura qoranno dhiigaa godhattee hin beektu yoo ta'e sababni isaa maali?
a) Sodaa qooduu fi addaan baasuu
b) Sodaa dhukkuba HIV/AIDSii
c) Sodaa walloluu
d) Sodaa hiikkaa
e) Sodaa qarshii dhabuu
f) Sodaa hojii irraa ari'amuu
g) Ijaa itti hin qophooneef
h) Iddoo itti qoratamani waanan hin beekneef
i) Bu'aa qorannoo dhiigakoo baruu waanan hin barbaanneef
j) Fayyaakoo waanan ta'eef
k) Gorsii qorannoo dhiiga duraa waan naaf hin laatamneef
l) Garabiraa (ibsi)
10. Amma qoranno dhiigaa godhachuu hin barbaaddu yoo ta'e, gara fulduraatti yoom qoratamuu barbaadda?
a) Ergan da'ee booda
b) Da'ee harma hoosisuu jalqabuu koo dura
c) Gara fuulduraatti gaafa waaqni jedhe
d) Yoom'iyyuu qoratamuu hin barbaadu
e) Yoom akkan qoratamu hin murteessine
f) Garabiraa (ibsi)
11. Ulfa kanaan sii meeqa mana yaalaa kanatti deddeebiteetta?
a) Al-tokko b) Al-lama c) Al-sadiif isaa ol.

2.3 Gaffilee wal-amanamtummaa hojjetaa fayyaa hadholii ulfaa gidduu jiru.

1. Waligaltee isiniif (haadholii) fi hojjetoota fayyaa gidduu jiru akkamitti ilaalta?
 - a) Baay'ee baay'ee gaariidha
 - b) Baay'ee gaariidha
 - c) Gaariidha
 - d) Homaa hin jedhu
 - e) Gaariis gadhees miti
 - f) Gaarii miti
- 2 Waligaltee isiniif (haadholii) fi hojjetoota fayyaa gidduu jiru gaarii yoo ta'e, sababni isaa maal jettee yaada?
 - a) Yeroo nu argan ho'isanii nudubbisu
 - b) Waan isaan gaafannu sirritti nuu ibsu
 - c) Dhibee keenya sirriitti nu aggeffatu
 - d) Hojii isaaniif dhukkubsatoota isaanii sirriitti kabaju
 - e) Yerootiin hojii isaanii irratti argamu
 - f) Garabiraa(ibsii) -----
3. Waligaltee isiniif (haadholii) fi hojjetoota fayyaa gidduu jiru yoo gaarii ta'uu baate, maaliif?
 - a) Mirga keenya dhiibu
 - b) Dhibee keenya sirriitti hin aggeffatan
 - c) Yerootiin hojii isaanii irratti hin argaman
 - d) Akka gadi aantummaatti nu ilaalu
 - e) Garabiraa (ibsii) -----
4. isiniif (haadholii) fi hojjetoota fayyaa gidduu jiru yoo gaarii hin taane, akkamitti fooyya'uu danda'a?
 - a) Hojjetaa fayyaa hojii isaa irraa ari'uu
 - b) Yeroo yeroon barumsa kennuu
 - c) Hojjetaa fayyaa biraan iddoo buusuu
 - d) Garabiraa (ibsii) -----
5. Hjjetaan fayyaa akka qorannoo dhiigaa godhattu sitti himee atis feetee, gorsa qorannoo dhiigaa dursa siif kennametti gammaddeettaa?
 - a) Eeyyee
 - b) Lakki
6. Gaaffii "**lack. 5**" keessatti gammaddeetta yoo ta'e hangam?
 - a) Guddaa
 - b) Gidduu galeessa
 - c) Xiqqoo

7. Hojjetaan fayyaa odeeffannoo koo iccitii isaa eega jette yaaddaa?
a) Eeyyee b) Lakki
8. Gaaffii “**lack.7**” keessatti amanta yoo ta’e hangam?
a) Baay’ee b) Gidduu galeessa c) hanga ta’e d) Xiqqoo
9. Gaaffii “**lack. 7**” keessatti hin amantu yoo ta’e maaliif?
a) Waan na beekuuf waa’ee koo nama biraatti dabarsee himuu ni danda’a
b) Hojjetootni fayyaa icciitii dhukkubsatoota isaanii dabarsanii himu waan jedhamuuf
c) Hojjetootni fayyaa icciitii dhukkubsatoota isaanii akka eegan waan hin beekneef
d) Garabiraa (ibsii) -----

Qualitative questions

1. Hangam HIV/AIDSiif saaxila ba’era jettee yaadda?
2. Hojjetaan fayyaa qorannoo HIV/AIDS akka godhattu sigaafatee/sigaafatee turee?
3. Hojjetaan fayyaa qorannoo HIV/AIDS akka godhattu yoo si hin gaafanne ta’e maaliif?
4. Qorannoo dhiigaa godhachuuf fedha qabdaa?
5. Qoratamuu hin barbaadduu yoo ta’e maaliif?
6. Ati hojjetaa fayyaa qorannoo dhiigaa akka godhattu gaafatee turee? Hin gaafanne yoo ta’e maaliif?
7. Kaka’umsa hojjetaa fayyaan qorannoo dhiigaa akka godhatamu jiraachuu isaa beektaa?
8. Kaka’umsa hojjetaa fayyaan qorannoo dhiigaa godhachuun bu’aa qaba jettee yaaddaa?
9. Waligalteen hadhooliif hojjetaa fayyaa gidduu jiru akkam jettee yaaddaa?

መጠይቅ

በአዲስ አበባ ዩኒቨርሲቲ አጠቃላይ የነርስ ድጋግ-ትምህርት ክፍል

ወደ አማርኛ የተተረጎመ ቃለ-መጠይቅ

የመልስ ስጪ ቃለ መጠይቅ ቅጽ

የምርምሩ አላማ በጤና ባለሙያዎች አነሳሽነት የአች አይ ቪ ምርመራ ለማድረግ የእናቶች ፍቃደኝነት፣ ያሉት እንቅፋቶችና በባለሙያና በነፍሱ-ጡር እናቶች መንከከል ያለውን የመተማመን ግንኙነት ለማጥናት ነው

መግቢያ

1. የመጠይቁ መለያ ቁጥር-----
2. የጠያቂዋ ስም-----

እኔ የምርምሩ አባል ነኝ። እኔ የምጠይቅዎትን (የማነብልዎትን) ጥያቄዎች በጥሞና ከዳመጡ በኋላ በምርምሩ ለመሳተፍና ላለመሳተፍ ያለዎትን ፍቃደኝነት ይገልጹልኛል።

የስምምነቱ ቅፅ

የጥናቱ አላማ በጤና ባለሙያዎች አነሳሽነት የአች አይ ቪ ምርመራ ለማድረግ የእናቶች ፍቃደኝነት፣ ያሉት እንቅፋቶችና በባለሙያና በነፍሱ-ጡር እናቶች መንከከል ያለውን የመተማመን ግንኙነት ለማጥናት ነው።

እርሶዎ በጥናቱ ውስጥ ከሚሳተፉት እናቶች አንድዎ ነዎት። የሚሰጡኝ መረጃዎች በሙሉ ምስጥርነታቸው በሚገባ የተጠበቀና ለዝህ ጥናት ብቻ የሚውሉ ናቸው። የእርሶዎ ስም በየትኛውም ቦታ ላይ አይጻፍም። ለሚሰጡኝ መረጃዎች የተለየ ቁጥር ይሰጣቸዋል። የጥናቱ ውጤት ብታተምም እንከን እርሶዎና ለሎች የጥናቱ ተሳታፊዎች የሚትሰጡት መረጃ አጠቃላይ ይዘቱ ነው የሚታተመው።

ባጠቃላይ መጠይቁ በፍቃደኝነት ላይ የተመረከዘ ነው። እርሶዎ በጥናቱ ለመሳተፍም ሆነ ላለመሳተፍ ሙሉ መብት አለዎት። በጥናቱ አለመሳተፍዎ በእርሶዎም ሆነ በእርሶዎ ቤተሰቦች ላይ በዝህ ጤና ጣቢያ ወይም ሆስፕታል ውስጥ ለመታከም ምንም ተጽዕኖ አያመጣብዎትም። ሆኖም እርሶዎ የሚሰጡን መረጃ ጥናቱን ከግቡ ለማድረስ ትልቅ አስተዋፅኦ አለው።

በጣም አመሰግናለሁ።

ከመረጃ ሰጪዎ ጋር ከተስማማችሁ ቃለ መጠይቁን መቀጠል ይቻላል።

1. በጥናቱ ውስጥ ለመሳተፍ ፍቃደኛ ነዎት?
 - ሀ) አዎ ለ) አይደለሁም
2. ስምምነቱን የሞላው ሰው
 - ሀ) ስም-----ፊርማ-----
 - ለ) መ. ቁጥር-----
 - ሐ) ቀን-----ወር-----2001
3. ውጤት
 - ሀ) መጠይቁ በሙሉ ተሞልቷል
 - ለ) መረጃ ሰጪዎ ፍቃደኛ አይደለችም
 - ሐ) መረጃው በግማሽ ተሞልቷል
 - መ) ሌላ ምክንያት ከለ ይገለጽ -----
4. ያጸደቀው ሰው
 - ሀ) ስም -----ፊርማ-----ቀን-----

ማሳሰቢያ: መረጃ ሰጪን ማስገደድ የተከለከለ ነው።

ክፍል አንድ

1. እድሜ-----

ሃይማኖት

- ፐሮተስታንት
- ኦርቶዶክስ
- ሙስሊም
- ካቶሊክ
- ሌላ(ይገለፅ)-----

ብሀረሰብ

- ኦሮሞ
- አማራ
- ትግረ
- ጉራጌ
- ሌላ(ይገለፅ)-----

2. የጋቢቻ ሁኔታ

- ❖ ያገባቸ
- ❖ ያላገባቸ
- ❖ የፈታቸ
- ❖ የሞተባት

3. የትምህርት ሁኔታ

- ያልተማረቸ
- አንደኛ ደረጃን ያጠናቀቀቸ
- ሁለተኛ ደረጃን ያጠናቀቀቸ
- ኮለጅና ከዚያ በላይ

4. የሥራ ሁኔታ

- የቤት እመበት
- የቀን ሠራተኛ
- ነጋዴ
- የቤት ሠራተኛ
- የመንግሥት ሠራተኛ
- ሌላ (ይገለፅ) -----

5. አማካይ የቤተሰብ ገቢ-----

6. የቤተሰብ ብዛት.....

7. የዕርግዝና ብዛት-----በሀይወት ያሉ ልጆቹ ብዛት-----

ክፍል ሁለት

የፍቃደኝነት ሁኔታ

2.1 ፍቃደኝነትን የሚመለከቱ መጠይቆች

1. ይህ ዕርግዝና በእቅድና ተፈልጎ ነው?

- ሀ) አዎ
- ለ) አይደለም

2. ሰዎች እንደት አድርገው ራሳቸውን ከኤች አይ ቪ/ኤድስ ይከላከላሉ ብለው ያስባሉ? (ከአንድ በላይ መመለስ ይቻላል)

- ሀ) በመታቀብ
- ለ) ብዙ ጋደኞች እንዳይኖራቸው በማድረግ
- ሐ) የሰሉ ዕቃዎችን በጋራ አለመጠቀም
- መ) በወባ ትንኝ መነከስን በመከላከል
- ሠ) አች አይ ቪ ካለበት ሰው ጋር የአካል ንክኪ ባለማድረግ
- ሰ) አች አይ ቪ ካለበት ሰው ጋር አብሮ ባለመብላት
- ሰ) አች አይ ቪ ካለበት ሰው ጋር አብሮ ባልመኖር
- ቀ) ሌላ (ይገለፅ) -----

3. ከአች አይ ቪ ጋር የሚትኖር እናት መቼ ወደ ልጅዋ ኤች አይ ቪ/ኤድስን ማስተላለፍ ትችላለች ብለው ይገምታሉ? (ከአንድ በላይ መመለስ ይቻላል)

- ሀ) በእርግዝና ጊዜ
- ለ) በወሊድ ጊዜ
- ሐ) ጡት በሚታጠባበት ጊዜ
- መ) አላውቀውም

4. ኤች አይ ቪ ከእናት ወደ ልጅ እንዳይተላለፍ ምን መደረግ አለበት? (ከአንድ በላይ መመለስ ይቻላል)

- ሀ) ጡት እንዳያጠቡ መከላከል
- ለ) የእድሜ ማራዘሚያ መድሃኒቶችን መውሰድ
- ሐ) ሌላ (ይገለፅ) -----
- መ) አላውቀውም
- ሠ) መልስ አልሰጠችም (ዝምታን መረጠች)

5. የኤች አይ ቪ/ኤድስ መከላከያ መንገዶችን ከማን ጋር ይመክራሉ? (ከአንድ በላይ መመለስ ይቻላል)

- ሀ) ከባለቤቱ ጋር
- ሐ) ከእናቱ ጋር
- ሠ) ከወንድሜ ጋር
- ለ) ከአባቱ ጋር
- መ) ከእህቱ ጋር
- ረ) ከጎረቤቱ ጋር
- ሰ) ሌላ (ይገለፅ) -----

6. በኤች አይ ቪ/ኤድስ የመያዝ እድልዎ ምን ያክል ነው ብለው ያምናሉ?

- ሀ) ዝቅተኛ ነው
- ለ) መካከለኛ ነው
- ሐ) ከፍተኛ ነው
- መ) አላውቀውም

7. በኤች አይ ቪ/ኤድስ የመያዝ እድል ይኖረኛል ብለው የሚያምኑ ከሆነ ምልክቶቹ ምንድን ነው? (ከአንድ በላይ መመለስ ይቻላል)

- ሀ) ብዙ ጋደኞች ስለነበሩኝ
- ለ) ጥንቃቄ የጎደለው ግንኙነት አድርገ ስለነበረ
- ሐ) ባለቤቱን ስለማላምነው
- መ) ንጽህናው ባልተጠበቀ መርፈ ተጠቅመ ስለነበር
- ሠ) ኤች አይ ቪ ካለበት ሰው ጋር የግብረ-ሥጋ ግንኙነት አድርገ ስለነበረ
- ረ) ጎጂ በሆኑ ባህላዊ መሳሪያዎች ተጠቅመ ስለነበረ

ሰ) ሌላ (ይገለጽ)

8. ከዝሆን በፊት የኤች አይ ቪ ምርመራ አድርገው የሚያውቁ ከሆነ አሁን ለመመርመር ፍቃደኛ ነዎት?

- ሀ) አዎ
- ለ) አይደለም

9. የጤና ባለሙያው የኤች አይ ምርመራ እንድያደርጉ ጠይቆዎት ነበር?

- ሀ)) አዎ
- ለ) አልጠየቀኝም

8. የጤና ባለሙያው ከልጠየቀዎት እርሶም ለመመርመር ጠይቀው ነበር?

- ሀ)) አዎ
- ለ) አልጠየቀኝም

11. በእርሶም አስተያየት ሰዎች መቼ የኤች አይ ቪ ምርመራ ማድረግ አለባቸው ብለው ያስባሉ? (ከአንድ በላይ መመለስ ይቻላል)

- ሀ) በማንኛውም ጊዜ
- ለ) በጣም ስታመሙ
- ሐ) የበሽታውን ምልክት ስያሳዩ
- መ) ከጋቢቻ በፊት
- ሠ) ሌላ (ይገለጽ)

12. የጤና ባለሙያው የቅድመ ምርመራ የምክር አገልግሎት ሰጥቶዎት ነበር?

- ሀ) አዎ
- ለ) አልሰጠኝም

2.2 በጤና ባለሙያ አነሳሽነት የኤች አይ ቪ ምርመራ ለማድረግ ያሉ እንቅፋቶች

1. በጤና ባለሙያ አነሳሽነት የኤች አይ ቪ ምርመራ እንደሚደረግ ሰምተው ያውቃሉ?

- ሀ) አዎ
- ለ) አላውቅም

2. ሰምተው የሚያውቁ ከሆነ መረጃውን ከየት አገኙ? (ከአንድ በላይ መመለስ ይቻላል)

- ሀ) ከጤና ባለሙያ
- ለ) ከጋደኛ
- ሐ) ከመገናኛ ብዙሀን
- መ) ከሀይማኖት አባቶች
- ሠ) ሌላ (ይጠቀስ)

3. በጤና ባለሙያ አነሳሽነት የኤች አይ ቪ ምርመራ ማድረግ ለነፍሱ-ጡር እናቶች ጠቃሚ ነው ብለው ያስባሉ?

- ሀ) አዎ
- ለ) አይደለም

4. በጤና ባለሙያ አነሳሽነት የኤች አይ ቪ ምርመራ ማድረግ ጠቃሚ አይደለም ከሉ ለምን? (ከአንድ በላይ መመለስ ይቻላል)

- ሀ) ለመመርመር ስላልተዘጋጀሁ ጭንቀትን ይጨምራል
- ለ) ምርመራውን ፍራቻ ወደ ጤና ድርጅት እንዳልመጣ ያደርገኛል
- ሐ) ምርመራውን ፍራቻ በቂ መረጃ እንዳልሰጥ ያደርገኛል
- መ) በነፍሱ-ጡር እናቶችና በጤና ባለሙያዎች መካከል ያለውን ግንኙነት ያበላሻል
- ሠ) ሌላ (ይጠቀስ)

5. በጤና ባለሙያ አነሳሽነት የኤች አይ ቪ ምርመራ ማድረግ ለነፍሱ-ጡር እናቶች የሚሰጠው ጥቅም ምንድን ነው? (አንድ በላይ መመለስ ይቻላል)

- ሀ) እናቶችን ለምርመራ ያነሳሳል
- ለ) ራስን ለማወቅ ይጠቅማል
- ሐ) ኤች አይ ቪ ከእናቶች ወደ ሕፃናት እንዳይተላለፍ ያደርጋል
- መ) ሌላ (ይጠቀስ)

6. ምርመራ ያደረጉበት ክፍል አመቺነቱ እንዴት ነው?

- ሀ) ጥሩ ነው
- ለ) ጥሩ አይደለም
- ሐ) መልስ አልሰጠኝም (ዝምታን መረጠኝ)

7. በጤና ባለሙያ አነሳሽነት የኤች አይ ቪ ምርመራ ለማድረግ የሚመረጠው የታ የትኛው ነው ይላሉ?

- ሀ) ወንድ
- ለ) ሴት
- ሐ) የትኛውም የታ ብሆን ችግር የለውም

8. ከዝህን በፊት የኤች አይ ቪ ምርመራ አድርገው ከሆነ መረጃውን ከየት ሰሙ?

- ሀ) ከጤና ባለሙያ ለ) እራሴ ሐ) ከጋደኞቻቸው
- መ) ከባለቤቱ ሠ) ከሀይማኖት አባቶች ረ) ሌላ (ይጠቀስ)

9. ከዝህን በፊት የኤች አይ ቪ ምርመራ አድርገው የማያውቁ ከሆነ ለምን?

- ሀ) መድሰትና መገለልን ፍራቻ
- ለ) የበሽታውን አደገኛነት በመፍራት
- ሐ) መመታትና ስድብን ፍራቻ
- መ) ፍችን በመፍራት
- ሠ) የቤት ወጭ እንዳልከለከል በመስጋት
- ረ) ከሥራ የ እንዳልባረር በመስጋት
- ሰ) ለመመርመር ስላልተዘጋጀሁ
- ሸ) የሚመረመሩበትን ቦታ ስለማላውቅ
- ቀ) የምርመራ ውጤቱን ማወቅ ስላልፈለኩ
- በ) ጤናማ ስለሆንኩ
- ተ) የቅድመ-ምርመራ የምክር አገልግሎት ስላልተሰጠኝ
- ቸ) ሌላ (ይጠቀስ)

10. ባሁኑ ጊዜ ለመመርመር ፍቃደኛ ከልሆኑ መቼ መመርመር ይፈልጋሉ?

- ሀ) ከወሊድ በሐላ ለ) ጡት መጥባት ከመጀመሪያ በፊት
- ሐ) ወደ ፊት አንድ ቀን መ) መቼም መመርመር አልፈልግም
- ሠ) መቼ እንደሚመረመር አልወሰንኩም ረ) ሌላ (ይጠቀስ)

9. በዚህ እርግጠና ስንት ጊዜ ወደዚህ ጤና ድርጅት የእርግጠና ምርመራ ለማድረግ ተመላልሰዋል?

- ሀ) ለመጀመሪያ ጊዜ ለ) ለሁለተኛ ጊዜ ሐ) ለሦስተኛና ከዚያም በላይ

2.3 በነፍሱ-ጡር እናቶችና በጤና ባለሙያዎች መካከል ያለውን የመተማመን ግንኙነት የሚመለከቱ ጥያቄዎች

1. በነፍሱ-ጡር እናቶችና በጤና ባለሙያዎች መካከል ያለው የመተማመን ግንኙነት

እንዴት ነው ብለው ይገምታሉ?

- ሀ) እጅግ በጣም ጥሩ ነው ለ) በጣም ጥሩ ነው ሐ) ጥሩ ነው
- መ) ምንም አይልም ሠ) ጥሩም መጥፎም አይደለም ረ) ጥሩ አይደለም

2. በነፍሱ-ጡር እናቶችና በጤና ባለሙያዎች መካከል ያለው የመተማመን ግንኙነት ጥሩ ከሆነ እንዴት?

- ሀ) ሞቅ አድርገው ይቀበሉናል
- ለ) ያለውን እውነታ በትክክልና በእርግጠኝነት ያብራሩልናል
- ሐ) ችግራችንን ለማዳመጥና ለመረዳት ፍቃደኞች ናቸው
- መ) ሥራዎቻቸውንና እናቶችን ስለምያከብሩ
- ሠ) የሥራ ጊዜያቸውን ስለሚያከብሩ
- ረ) ሌላ (ይገለፅ)

3. በነፍሱ-ጡር እናቶችና በጤና ባለሙያዎች መካከል ያለው የመተማመን ግንኙነት ጥሩ ከልሆነ ለምን?

- ሀ) መብታችንን ስለሚጋፉን
- ለ) ችግሮቻችንን ስለማያዳምጡን
- ሐ) የሥራ ጊዜያቸውን ስለማያከብሩ
- መ) ዝቅ አድርገው ስለሚመለከቱን

ሠ) ሌላ (ይጠቀስ)

4. በነፍስ-ጡር እናቶችና በጤና ባለሙያዎች መካከል ያለው የመተማመን ግንኙነት ጥሩ ከልሆነ እንዴት ይስተካከላል ብለው ያስባሉ?

ሀ) የጤና ባለሙያውን ከሥራው በማባረር

ለ) ለጤና ባለሙያው ስልጠና መስጠት

ሐ) የጤና ባለሙያውን በሌላ ባለሙያ በመተካት

መ) ሌላ (ይገለፅ)

5. የጤና ባለሙያ እንድመረመሩ ጠይቆት እርሶዎም ለመመርመር ፍቃደኛ ሆነው የጤና ባለሙያው በሰጠዎት የቅድመ-ምርመራ የምክር አገልግሎት ረክተዋል?

ሀ) አዎ

ለ) አልረከሁም

6. በባለሙያው በሚሰጥዎት የቅድመ-ምርመራ የምክር አገልግሎት ከረኩ ምን ያክል ነው?

ሀ) ከፍተኛ

ለ) መካከለኛ

ሐ) ዝቅተኛ

7. የጤና ባለሙያ ምስጥረን ይጠብቅልኛል ብለው ያምናሉ?

ሀ) አዎ

ለ) አላምንም

8. የጤና ባለሙያ ምስጥረን ይጠብቅልኛል ብለው ከመኑ ምን ያክል ያምናሉ?

ሀ) በጣም ብዙ

ለ) ብዙ

ሐ) መለስተኛ

መ) ጥቅት

9. የጤና ባለሙያ ምስጥረን ይጠብቅልኛል ብለው ከላመኑ ለምን? (ከአንድ በላይ መመለስ ይቻላል)

ሀ) ባለሙያው(ዋ) ስለሚያውቀኝ ምስጥረን ለሌላ ሰው ይናገርብኛል ብዬ ስለሚሰጋ ነው

ለ) የጤና ባለሙያዎች የበሽተኞቻቸውን ምስጥር ለሌሎች አሳልፈው ይናገራሉ የሚል ወረ ስለሰማሁ ነው

ሐ) የጤና ባለሙያዎች የበሽተኞቻቸውን ምስጥር እንደሚጠብቁ ስለማላውቅ

መ) ሌላ (ይጠቀስ)

ክፍል ሦስት

ለኤች አይ ቪ ቨይረስ ምን ያክል ተጋልጫለሁ ብለው ያስባሉ?

1. የጤና ባለሙያ የኤች አይ ቪ መርመራ እንድያደርጉ ጠይቆት ነበር?

2. የጤና ባለሙያ የኤች አይ ቪ መርመራ እንድያደርጉ ከልጠየቁዎት እርሶዎ ጠይቀውት ነበር? እርሶዎ ከልጠየቁስ ለምን?

3. የኤች አይ ቪ ምርመራ ለማድረግ ፍቃደኛ ነዎት?

4. ፍቃደኛ ከልሆኑ ለምን? ፍቃደኛ ከሆኑስ?

5. በጤና ባለሙያ አነሳሽነት የኤች አይ ቪ ምርመራ አገልግሎት መኖሩን ያውቃሉ?

6. በጤና ባለሙያ አነሳሽነት የኤች አይ ቪ ምርመራ ለነፍስ-ጡር እናቶች ጠቃሚ ነው ብለው ያምናሉ?

7. በነፍስ-ጡር እናቶችና በጤና ባለሙያዎች ግንኙነት መካከል ያለው መተማመን እንዴት ነው ብለው ያስባሉ?

DECLARATION

This thesis proposal is my original work and has not been presented for a degree in any other university and that all source of material used have been dully acknowledged.

Name of principal investigator: -----

Date _____ Sign _____

Name of advisor: -----

Date _____ Sign _____