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AN INFANT FEEDING EXPERIENCE OF HIV POSITIVE MOTHERS UTILIZING PMTCT SERVICES: THE CASE OF TIKUR ANBASSA HOSPITAL

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An Infant Feeding Experience of HIV Positive Mothers Utilizing PMTCT Services: The Case of Tikur Anbassa Hospital

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ACRONYMS

AFASS- Affordability, Feasibility, Accessibility, Sustainability, and Safety

AIDS - Acquired Immunodeficiency Syndrome

ANC - Antenatal Care

ART - Antiretroviral Treatment

CDC - Centers for Disease Control and Prevention

CSA - Central Statistics Agency

EBF- Exclusive Breast Feeding

EDHS – Ethiopia Demographic Health Survey

EIF- Exclusive Infant Feeding

ERF- Exclusive Replacement Feeding

FHD-Family Health Department

HAART- Highly Active antiretroviral Therapy

HAPCO - HIV/AIDS Prevention & Control Office

HIV - Human Immunodeficiency Virus

MOH - Ministry of Health

PLWHA - People Living with HIV/AIDS

PMTCT - Prevention of Mother-to-Child Transmission

SCT- Social Cognitive Theory

UNAIDS - Joint United Nations Program on HIV/AIDS

VCT - Voluntary Counseling and Testing

WHO - World Health Organization

ABSTRACT

Mother to Child Transmission of HIV can occur during pregnancy, delivery, and breast-feeding and it accounts for more than 90% of pediatric AIDS. Various studies indicate that the rate of Mother to Child Transmission of HIV is high among infants who were on mixed feeding. UNICEF UNAIDS and WHO recommended that, all women have the right to choose exclusive breastfeeding or exclusive replacement feeding. However, numerous contextual factors can influence mothers in their choices and decisions related to what and how they feed their infants. An understanding of factors that influence women's adherence to the recommended infant feeding is critical in identifying ductile point's intervention.

The study aims explore the experiences of infant feeding practices of HIV positive women who have used Prevention of Mother to Child Transmission service.

Qualitative data was collected by the principal investigator using semi structured in-depth interview from 12 HIV Positive mothers who use PMTCT service at Tikur Anbassa hospital and was analyzed using principles of thematic content analysis.

Most of the informants have opted for Exclusive breast-feeding due to economic reasons. Moreover, the long-standing community belief that attaches breast-feeding with motherhood also has an implication not to choose replacement feeding. Fear of disclosure and practicing exclusive infant feeding in an area where predominant breastfeeding is a norm are important challenge that affects mothers well being because of ostracization and stigma, which makes their lives difficult in the community. The very basic essence of coping strategy is the mother's ambition to have HIV free child. Most of the Study informants have appreciated the PMTCT services. The study has explored issues related to adherence to Exclusive Infant Feeding practices. Hence, strengthening the counseling program, expanding PMTCT services, promoting exclusive breast-feeding by all mothers, continuous work on stigma and discrimination, linking the ANC and PNC with mother support group, are the major intervention areas that have been suggested in an effort to improve the effectiveness of PMTCT service.

Key words: Exclusive Infant Feeding, AFASS, PMTCT

INTRODUCTION

HIV/AIDS epidemic is a threat to health and socio-economic advancement of most countries in the world. The issue goes beyond health problem and it becomes a cause for social disintegration and economic deterioration of many developing countries including Ethiopia. The national single point HIV prevalence estimate was 2.1%. Disaggregated prevalence rate was 1.7% for males and 2.6% for females; while the urban and rural prevalence rates stood at 7.7% and 0.9, respectively (Ministry of Health (MOH), 2007:p3).

De cock stated that Mother -to -child transmission can occur during pregnancy, at the time of delivery, and after birth through breast-feeding (as cited in World Health Organization (WHO), 2001).

Ever year around the world, approximately 600,000 babies are infected with HIV. Five hundred thousand of these babies are born in Africa. MTCT of HIV is responsible for nearly all pediatric infections and for about 10% of all new HIV infections worldwide. (Piwoz, 2000.p 1)

The overwhelming source of HIV infection in young children is MTCT of the virus, with an estimated risk of 5-10% during pregnancy, 10-20% during labor and delivery, and 5-20% through breastfeeding. Comparing data from currently available studies, breastfeeding may be responsible for as much as one third to one-half of all HIV infections in infants and young children in African settings. Although very few reports provide detailed information on the mode (or quality) and duration of breastfeeding, recent studies suggest that exclusive breastfeeding during the first few months of life may be associated with a lower risk of HIV transmission than mixed feeding (Linkages/Zambia, 2002)

Pediatric AIDS is becoming a major health problem in our country. In response to this, PMTCT programs are being starting in many hospitals and health centers throughout the country. According to MOH (2006), in 1998, the National PMTCT services Coverage was

19.1%; unlike the National figure in Addis Ababa, all Government health facilities provide PMTCT services.

Ethiopia has adopted the WHO/UNICEF/UNAIDS four-pronged prevention of mother to child transmission (PMTCT) strategy as a key entry point to HIV care for women, men, and families. These are primary prevention of HIV infection, prevention of unintended pregnancies among HIV infected women, prevention of HIV transmission from infected women to their infants and treatment, care, and support of HIV infected women, their infants, and families. Addressing all four prongs has potential to interrupt the cycle that leads to MTCT at several points (MOH, 2007:p5).

According to the sixth report of AIDS in Ethiopia, In Addis Ababa 1998 E.C. 135,904 pregnant women attended antenatal clinic of whom28, 649 were counseled, and 19,541 of them tested for HIV. Out of the tested pregnant women, 1834 are HIV positive and counseling on infant feeding given to 1948 women (MOH, 2006:p31).

Administration of Antiretroviral (ARV) prophylaxis to the mother during labor and to the child within 72 hours after birth has substantially reduced MTCT during labor and delivery. A comprehensive PMTCT program can significantly reduce the number of infected infants by providing guidelines for improving clinical care for women and their children. However, developing and implementing a complete PMTCT program- with strategies for ARV prophylaxis, safer childbirth, and safer infant feeding practices-is a complex process, as the ante natal, delivery and postnatal coverage is still low (MOH, 2007:p31).

Infant feeding practices are socially and culturally embedded within, community norms, the cultural believes, and practices of mothers and those who influence them must be taken into consideration in designing an intervention. Stigma and fear of disclosure of positive HIV status is a major concern influencing mothers' infant feeding choice, even

though they are highly committed to preventing the transmission of HIV to their babies due to fear of lack of support by their partner and the community (Koniz-Booher P et al, 2004).

PROBLEM STATEMENT

Ethiopia is one of the countries most severely hit by the HIV epidemic. Among the 105,675 HIV -infected pregnant women, an estimated 30,358 HIV positive birth occurred. MTCT of HIV can occur during pregnancy, delivery, and breast-feeding and it accounts for more than 90% of pediatric AIDS. The main objective of the PMTCT is to reduce the transmission of HIV from HIV infected mothers to their off springs. HIV transmission rate without breast-feeding is 15%-25%, with breast-feeding 25%-50% depending on duration of breast-feeding (MOH, 2007:15).

As stated in the 1998 draft strategy, reducing MTCT of HIV is a complex challenge. It involves expanding HIV counseling and testing so that women who wish to know their status can do so with full confidentiality. It calls for improving antenatal and delivery care. PMTCT also demands protection against possible stigma and rejection of HIV positive women who decide not to breastfeed since in most developing countries in many cases; nowadays identifies a woman as HIV positive, both within her home and within the community.

Mothers who test positive need counseling and to be provided with appropriate information in order to make informed choices that suit their circumstances. As each situation is unique, counseling should be tailored to individual needs to balance the risk of replacement feeding with the risk of transmission through breastfeeding (MOH, 2007:20).

Given the importance of breastfeeding to infant health, and the risk that breast milk convey in MTCT of HIV, UNICEF, UNAIDS and WHO recommended that all women have the right to choose exclusive breastfeeding or exclusive replacement feeding. Thus, appropriate alternatives to breastfeeding must be made available and affordable to HIV

positive mothers, while efforts continue to promote exclusive breastfeeding for HIV- women, and those women of unknown status (MHO, 2007:5).

However, Infected women in resource-limited countries have a significant dilemma: breast-feeding, although it provides substantial health and survival benefits to the infant and economic, social, and contraceptive, benefits to the mother, is associated with risk of HIV transmission to the infant. On the other hand, most of HIV positive mothers do not fulfill the AFASS criteria for replacement feeding (Samuel, 2007).

Various studies indicate that the rate of MTCT of HIV is high among infants who were on mixed feeding. It is also proved that those infants breast-fed for longer period are at greatest risk of HIV infection.(It will be discussed in detail in literature review) These findings call for urgent action to educate, counsel and support HIV positive women in making decisions on how to nourish their infants safely. Because of this, WHO recommended infant feeding counseling focusing on avoidance of mixed feeding and prolonged breast-feeding depending on the country's context as one of the strategy in PMTCT program (Koniz-Booher P et al, 2004).

The health implications of infant feeding practices demand immediate attention. The difficulty, however, arises in the numerous contextual factors that can influence mothers in their choices and decisions related to what and how they feed their infants.
Although there are many published literatures on infant feeding practice in HIV context in other countries, their relative scarcity literature in Ethiopia is undeniable.

Furthermore, little is known about mothers' perspectives and experiences of exclusively breastfed or replacement feeding as a strategy to reduce postnatal HIV transmission in our country. Despite this fact, practice of mixed feeding and prolonged breast-feeding is high in the community (Ethiopian Demographic Health survey (EDHS), 2005:p146). It is against this background that the plans of the study on HIV positive women

infant feeding practices, with more focus on exclusive breastfeeding and exclusive replacement feeding practice.

Understanding of factors that influence women's adherence to the recommended infant feeding is critical in identifying malleable point's intervention. Therefore, it is of great interest to assess identification of exclusive infant feeding practices of HIV positive women attending PMTCT service to get insight into the various factors that influence infant feeding decisions.

Significance of the Study

a. Considering the problem of MTCT of the HIV, studies addressing this issue in Ethiopia are few and counseling on infant feeding option is among the core interventions of MTCT of HIV.

b. Helps to assess the infant feeding practices that are culturally and socially embedded in community norms, the cultural beliefs and practices of HIV positive mothers and those that influence them.

c. This study examines the challenge in implementation of exclusive breast-feeding strategy in PMTCT of HIV analyzes the availability of feeding options which are feasible, appropriate, acceptable, and likely to be sustainable and safe in the context of Addis Ababa.

Research Question

1. How HIV positive women attending PMTCT service are practicing exclusive infant feeding?

2. Is HIV positive mother infant feeding practice consistent with recommended guidelines?

3. What are the factors that influence adherence to National PMTCT recommended infant feeding?

Objective of the Study

General Objective

To explore infant feeding practices of HIV positive women who have used PMTCT service.

Specific Objectives

1. To identify factors that influence adherence to exclusive breast feeding option
2. To identify factors that influence adherence to exclusive replacement feeding option
3. To describe major challenges HIV positive women faced in practicing the recommended infant feeding option.
4. To discus how they cope with those influences to choose safer infant feeding practices.

LITERATURE REVIEW

Relevant literature was reviewed to increase understanding of infant feeding practice in relation to PMTCT of HIV and to identify literature gaps, which might support the choice of this topic. Various sources to access the literature were used and included Internet, WHO, UNICEF and UNAIDS reviewed studies, published and unpublished master theses, articles, and books. The review assisted in the conceptualization and understanding of concepts like PMTCT of HIV, infant feeding option in HIV context and the factors influencing it, the infant feeding practice of HIV positive mother in relation to international and national infant feeding strategies and exploration of theories that fit with the research question.

This part of the paper is structured as follows: First, it covers topics related to HIV and women, infant feeding practice in PMTCT context, International infant feeding strategy and its practicability in Africa and Ethiopia and the convergent and divergent views of the literature on the area of study, to be followed by theoretical discussions on infant feeding behavior.

HIV and Women

Women and young girls are disproportionately vulnerable to HIV. Their physiological susceptibility is at least 2 to 4 times greater than that 8 men and is men's is compounded by social, cultural, economic, and legal forms of discrimination. Infection in women and girls is fueled by: Poverty, low social status, and unequal economic rights and educational opportunities that can place exposed them to at greater risk of sexual exploitation, trafficking, and abuse, and gender power relations that limit their right to negotiate safe sex or refuse unwanted sex (UNFPA, 2001).

Furthermore, exploitation such as rape and abuse of young women and girls, especially in an emergency of conflicts and employment of harmful practices that deprive women of a means of protecting themselves from HIV infection, including early and forced marriages exposes women to HIV (UNFPA, 2001).

Gender roles and relations have a significant influence on the course and impact of the HIV/ AIDS epidemic. Women's subordinate position relative to men places them at considerable disadvantageous position in respect of with respect to their access to resources and goods, decision-making power, choices making and opportunities across all spheres of life. Globally, out of 40 million people living with HIV/AIDS, 17.5% are women and 77% of all women living with HIV are in sub-Saharan Africa. Among HIV positive adults, women account for 57% in sub-Saharan Africa, 26% in southeast Asia, 27% in Europe, and 25% in the US (UNAIDS,2005)

The HIV prevalence among young girls in Sub-Saharan Africa is dramatic. For example, in Zimbabwe the prevalence of HIV in men is about 5% and about 17% in women. AIDS is affecting women most severely in places where heterosexual sex is a dominant mode of HIV transmission, as is the case in sub-Saharan Africa and the Caribbean. According to recent population-based household surveys, adult women in sub-Saharan Africa are up to 1.3

times more likely to be infected with HIV than their male counterparts .This unevenness is greatest among young women aged 15–24 years and are about three times more likely to be infected than young men of their age (UNAIDS, 2004).

Similarly, according to UNAIDS (2005), the HIV/AIDS prevalence rate among pregnant women is higher than 10% in the capital cities of 11 African countries and exceeds 20% in five Southern Africa countries. Of 2.1 million children (0–14 years) living with HIV in the world, 1.9 million children live in sub-Saharan Africa. Likewise, in Ethiopia according to the national single point estimate (SPE) the prevalence of women is 2.6% compared to men1.8 %.(HIV/AIDS Prevention & Control Office (HAPCO) /MOH, 2007)

Overview of National PMTCT service

Mothers and children constitute the majority of the population and they are the most vulnerable groups for health problems. Ethiopia is one of the country's most severely hit by the HIV epidemic.

Maternal service shows slight improvement: ante natal coverage from 50% to 52%, and post natal care coverage from 16% to 19% in the year 2005/06 and 2006/07 and share of births attended by skilled health personnel from 9% to 16% in 2004 and 2005/07 respectively (MoFED,2007:p7-16).

The National prevalence rate is 2.2 %(urban 7.8% and rural 0.9%) Among one million HIV positive, 68,136 are below 15years of age. Furthermore, yearly 58,290 people die from AIDS every year. And of 125,147 people newly contacting the virus, 79,183 of them are pregnant women. And yearly 14,093 HIV positive infants are born each year. (HAPCO, 2007:p5).

The National PMTCT service started in 2004 in 32-health institutions and the service expanded to 719 in 2007; still it covers less than 50% of MCH provided health institutions. Even through, in Addis Ababa, all government health facilities provide PMTCT services; still

there is a need to expand the service to private health institution since most of women are treated there (HAPCO, 2007).

The National PMTCT services Coverage in 2004/5, 2007was 19.1% and 6% respectively and this is far to meet the MDG goals in the year 2010. Less ANC and health institution delivery coverage, low women decision-making and male involvement, and lack of awareness are the determinant factors, which contribute to low performance in PMTCT services (HAPCO, 2007).

By the end of 2005, the estimated Number of Children <15 Years Living with HIV/AIDS and newly Infected with HIV in sub-Saharan Africa are 2.3 million and 560,000 respectively. In Ethiopia, Children living with HIV/AIDS are 61,864 and New HIV infections are 13,836 and there are 10,887annual AIDS deaths in children (HAPCO/MOH, 2006).

Infant Feeding and HIV Transmission

Risk factors for MTCT are multifactorial. A high viral load increases the risk of vertical transmission, as does the acquisition of infection during pregnancy and breast-feeding. Women with advanced disease (low CD4 count) are at increased risk of transmission.

Global Infant Feeding Studies

A critical review and analysis of literature related to infant feeding practice in PMTCT of HIV is used to evaluate how the previous researchers conceptualized and operationalized the concept of exclusive infant feeding and to develop the conceptual framework of the study.

A substantial amount of research has been conducted on infant feeding practice in HIV context, yet it is also difficult to determine the factors that actually influence the mother. In the reviewed studies, the conceptualizations of adherence and infant feeding practice have both similarities and differences.

The study varies on how WHO recommended infant feeding is operationalized and measured. Environmental and social variables that influence adherence to the recommended infant feeding practice includes age, support systems, infant feeding attitudes, socioeconomic level, education and the quality of counseling. Knowledge and skill of the recommended infant feeding method and culture also have been seen to influence the practicability of the recommended infant feeding methods (Koniz-Booher P et al, 2004).

Feeding is a significant part of the daily care that mothers provide to their infants and is frequently cited as an area of maternal concern. Therefore, what and how mothers feed their infants has enormous health implication.

Mother to child transmission (MTCT) of HIV, a vertical transmission, is known to be responsible for more than 90% of HIV infections in children worldwide. The transmission can occur during pregnancy, during delivery and post partum through breastfeeding (WHO, 2004:4).

In order to reduce the risk of post partum HIV transmission, international organizations (the World Health Organization (WHO), UNICEF and UNAIDS) have been suggesting modified infant feeding options. Based on the 2007 recommendation (WHO. 2007), avoidance of all breastfeeding by HIV infected mothers to whom replacement feeding was acceptable, feasible, affordable, and sustainable and safe (otherwise known as the 'AFASS criteria') was recommended. For HIV positive mothers who did not fulfill the criteria to replacement feed their infants, exclusive breastfeeding for the first six month was the alternatives (MOH, 2007:20).

The de Paoli MM et al., (2003) studied the pregnant women perspective on WHO recommended infant feeding option guided by social cognitive theory. If they were found to be HIV-infected and were advised to do so, they would change to an alternative infant feeding method. Cow's milk was regarded as the most feasible infant feeding method for

local HIV infected mothers. Infant feeding formula was regarded as too costly, but if recommended by health workers and distributed free of charge, the majority of the women (82%) were confident that they would then choose this option. However, in the focus group discussions, women were less optimistic and expressed great concern for the social consequences of not breast-feeding such as lack of support from partner and potential negative reactions from the community.

In the comparative study done in Kenya and Zambia before and after the introduction of PMTCT services, pilot PMTCT sites revealed that, although there is a slight increase in using replacement feeding, there was no significant change from the undesirable practice of mixed feeding. The safer practice of exclusive breastfeeding; 37%, 69% and 70% of women in Lusaka, Karatina and Homa Bay, respectively, continue to practice mixed feeding. The researcher concluded that Promoting good infant feeding practices is challenging and PMTCT activities at pilot sites have failed to have an impact to date.

PMTCT providers should extend infant feeding counseling beyond antenatal care visits, following-up in the postpartum period when women are making decisions about how to feed their infants and grappling with the implementation of their choices (Rutenberg N, et al,2004 accessed on December 28th ,2008 from A Int Conf AIDS).

Even though the WHO/UNAIDS guidelines on feeding in HIV/AIDS settings are quite clear, many factors affect mothers' choice of feeding. HIV positive women living in developing countries have been noted to be different from of those living in developing countries in relation to their adherence of the recommended infant feeding option. Women living in developing countries are less adhering than those in the developed countries (Debra J, et al, 2003:p117). Furthermore, from Cameroon study (2000), strong family support has been shown increasing adherence to feeding method.

Study done in Botswana, Tanzania, and Nigeria has shown that circumstances and interests beyond HIV infected mothers' direct control ultimately influence even when HIV positive mothers go through infant feeding counseling, real care, and feeding of the infant. These include socio economic conditions, expectations of partners, mother in laws, extended families and the community (Shapiro RL etal. 2003; Debra J.2003; Leshabari SC,et al, 2007; Isiramen V, 2002).

A study in Zambia (Omari AA etal. 2003) reported that HIV positive women changed to mixed feeding very early, whether they started out with replacement feeding or exclusive breastfeeding. Similar finding from the Tanzania (Leshabari, 2006: 5) showed that mothers who had started out with replacement feeding ended up breastfeeding. Women explained that they could not withstand the social pressure to breastfeed and were concerned about their reputation as good mothers.

These studies agree on the complexity and difficulty among HIV positive mothers to stick firmly to any of the WHO recommended infant feeding methods.

This finding is significant because it supports the notion that HIV positive mothers may not base their feeding decisions solely on knowledge of advantage and disadvantage of different infant feeding methods, but rather a combination of factors. This finding is supported by Abashawi A, et al (2004), that mothers enrolled in Nigat clinical trial in Ethiopia who have the knowledge and close follow up choose 60% of the mothers decides to EBF and 3o% to ERF but try fail to continue up to the recommended time and they end up in mixed feeding to their child.

i. Replacement feeding

Replacement feeding defined, infant who fed on commercial formula or home modified animal milk. The practice of replacement feeding is much more prevalent in HIV-positive women than in HIV-unknown women. Moreover, free or subsidized formula,

mother's fear of transmitting HIV to their infants, advice from counselors or health workers, Partner or family involvement , Mother's educational level and mother's fear of transmitting HIV to their infants are some of the factors that influence the selection and successful practice of replacement feeding by HIV-positive mothers (Koniz-Booher P et al, 2004).

Many antenatal women in pMTCT programs change their minds about infant feeding when they learn they are HIV-positive, switching from intending to breastfeed to intending to replacement feed. In Botswana, 89% (141 of 158) of women who knew they were HIV-positive planned to replacement feed, and when interviewed up to 6 months after birth, 139 of those mothers were doing so (pMTCT Advisory Group, 2001).

The South Africa study reported that when mothers learned they were HIV-positive, they stopped breastfeeding immediately (Seidel et al, 2000). In Thailand, (Talawat et al, 2002) 94% (75 of 80) of HIV-positive mothers were applying replacement feeding at the time of interview, even though most had not planned to replacement feed before learning they were HIV-positive (as cited in (Koniz-Booher P et al, 2004).

However, Another South Africa and Botswana study has shown less replacement feeding practice. The Botswana study, concluded that adherence to replacement feeding was poor in spite of the intense follow-up (Shapiro et al, 2003, as cited in (Koniz-Booher P et al, 2004).

Similarly, in South Africa, (Rollins et al,2002) a study of HIV-positive pregnant women revealed that only 9% (18 of 189) planned to replacement feed, while 12 of the 18 were still doing so until the end of the first week after birth (as cited in (Koniz-Booher P et al, 2004).

Leroy et al, 2002 study in Cote d'Ivoire where free formula was provided , 59% (151 of 255) of HIV-positive women planned to replacement feed before delivery and 81% (123 of 151) of those who planned were doing so far two days after birth (as cited in (Koniz-Booher P et al, 2004). Chitsike's (2000) finding showed that, in Zimbabwe, 17% (32 of 188) of HIV-positive mothers of children up to 20 months in a pMTCT programme reported to counselors they were doing replacement feeding successfully so far. One South African study McCoy et al, 2000 indicates that the uptake and rate of replacement feeding is higher in urban areas than in rural ones Chitsike, circa (as cited in Koniz-Booher P et al, 2004).

On the other hand, the Uganda study of a pMTCT programme providing free formula revealed that, 43% (375 of 870) of HIV-positive pregnant women planned to replacement feed, while the remaining 57% planned to exclusively breastfeed. Of the 279 HIV-positive mothers in the study who initially accepted free formula, 78 never returned for more formula, and 47 returned but later defaulted. This showed that availability of free formula does not always ensure that the decision to replacement feed translates into successful practice, and such availability may lead to increased mixed feeding (Matovu et al, 2002).

ii. Exclusive breastfeeding

Exclusive breastfeeding defined as consuming only breast milk and not other liquids, milks, or solid foods except vitamins or prescribed medications. International guidelines recommend exclusive breastfeeding for the first six months based on scientific evidence of the benefits for infant survival, growth, and development. Breast milk provides all the energy and nutrients that an infant needs during the first six months. Exclusive Breastfeeding reduces infant deaths caused by common childhood illnesses

such as diarrhea and pneumonia, hastens recovery during illness, and helps employment of space births (LINKAGES, 2002).

Rates and duration of exclusive breastfeeding are relatively low/brief, regardless of the HIV status of mothers. In Botswana, self-reported exclusive breastfeeding rate since birth in a sample of mothers of infants aged 0-6 months was 33.7% in the control group (of unknown-HIV status to the study team), while in the programme group exclusive breastfeeding was reported by 2.7% of the HIV-positive mothers(pMTCT Advisory Group, 2001).

In Nigeria, mothers of any HIV status reported the following for Infants aged 4-6 months:335 reported predominant breastfeeding (defined as giving other liquids before one month of age): and 19% reported mixed feeding respectively. (Isiramen, 2002)

Based on the compilation of studies, it is estimated that MTCT rates, without any anti –retroviral intervention, range from 15 to 30% in the absence of breast-feeding; to 25% to 35% if is breast feeding for 6 months 30 to45%; if there is breast feeding for 18 to 24 months. De cock, 2000 stated that by the end of the year 2000, UNAIDS estimated that 1.3 million children were living with HIV/AIDS and 4.3 million children had already died of the disease (as cited by WHO, 2001, http://www.who.int).

iii. Mixed Feeding

Mixed Feeding means giving a baby breast milk and artificial feeds, either formula or cow milk or cereal, or other food.

The current UN recommendation is that HIV-positive mothers should never use mixed feeding. They should either breastfeed exclusively or replacement feed exclusively, but not mixing the two. The reason is that mixed feeding combines the risk of diarrhoea and other infections often associated with using infant formula or modified animal milk to replacement feeding with the risk of HIV-transmission due to breastfeeding. A study in Durban, South Africa (Coutsoudis et al, 2001) suggests that mixed feeding has a higher risk of HIV-transmission than breastfeeding (as cited in Koniz-Booher P et al, 2004).

Because of the recommendation against mixed feeding, pMTCT programmes ask antenatal HIV-positive women to choose between exclusive breastfeeding and replacement feeding, and to avoid mixed feeding. The reviewed studies show that most women make a distinct choice, but after delivery, they often end up mixed feeding early in the baby's life, whether they initially chose to exclusively breastfeed or exclusively replacement feed (Booher, P K et al, July 2004).

A Tanzania study found that 85% of HIV-positive mothers started exclusive breastfeeding but 46% were mixed feeding within a few days of delivery (de Paoli et al, 2001). In a Uganda study, all HIV-positive mothers started out exclusively breastfeeding but switched to mixed feeding by 3 months (Bakaki,) (as cited in Booher, et al, July 2004 and Leshabari SC,et al, 2007)

Counseling and support regarding the different feeding options and choices were recommended for HIV positive women to take place throughout pregnancy, labor and delivery. The updated recommendations are simplified and emphasized only in explaining well the two main infant feeding options for HIV positive women:- namely exclusive breastfeeding and replacement feeding. This has been done to make the counseling process

easier and more comprehensible; and it reduces the time needed for counseling (WHO. 2007: p4). A study conducted in Tanzania to assess the counselors' perspective on HIV and infant feeding dilemmas indicated that the problem is not only a confusion for HIV positive mothers but also the infant feeding scenario implies a confusion to the counselors (de Paoli, Manongi et al. 2002: p147).

National Infant Feeding Studies

Although there are different studies related to PMTCT, they do not comprehensively show the causal relationship of different factors in relation to HIV positive mothers infant feeding choice and implementation.

The HIV pandemic and the risk of mother-to-child transmission of HIV through breastfeeding pose unique challenges to the promotion of breast-feeding in most urban areas of Ethiopia, even among unaffected families (MOH, 2004, p3).

Breast-feeding is nearly universal in Ethiopia, and the median duration of any breast-feeding is long (25.8 months). On the other hand, exclusive breast-feeding is relatively short with a median duration of 2.1 months. Contrary to WHO recommendation only around one in three children age 4-5 months is enjoying exclusive breast-feeding (EDHS, 2005:p143).

The trends in infant feeding practice for children 0-5 months and 6-9 months, 2000 and 2005 shows that exclusive breast-feeding declined slightly among children under 6 months. While complimentary feeding increased between the two surveys. (EDHS, 2005:p146)

In Ethiopia in one clinical trial in NIGAT project on Dec 03, 530 HIV sero positive women were enrolled and almost 30% of women chose not to breast-feed at the time of enrollment. Of the 372 women enrolled in the breast-feeding cohort, 337 had live births and 90% were breast feed at the time of delivery discharge, and less than half were exclusive breast feed in the first week (Int Conf AIDS, 2004).

Of 166 infants who had been breast fed and had completed 6 months of follow-up by Dec03,16% were weaned by two weeks, 25% by 4 week, 47%by 10 weeks,58% by 14 weeks and 66%by 4 month (Abashawl A, et al, 2004).

In 1996, a Study done to assess the feeding pattern of infants in Addis Ababa. A city wide household of 1,202 randomly selected mothers showed prevalence rates of breast-feeding of 94.4%,90.5%, 84.9%,and 80.2% and those infant who were less than 4,4-5,6-9, and10 month and above respectively. Exclusive breast-feeding rate in those less than 4 months of age was found to be 32%, 44% than of the infants on bottle feeding (Kesela & kebede 1996).

Only 18%, 15%, and 19% of mothers, who had antenatal, childcare, and postnatal visits to health facilities, respectively got advice on child feeding (Kesela & kebede 1996).

In a study conducted on the status of breast-feeding in less than 2 years and implication of the occurrence of acute diarrhea at Jimma town, 98.8% of the children had ever breast fed at any time after birth. It was also found that out of the children aged four and above months 62.2% of them were predominantly breast fed, and from the same age group, 6.95% were exclusive breast-fed for the first 4-6 months after birth. (Biruk.2002)

Similarly, in a LINKAGE project formative research (2003), the infant and young child feeding practices in various community of Ethiopia showed that the infants are generally breast fed on demand unless mothers happen to be away, which is normatively supported and positively practiced. However, complementary foods and milk are given before six months of age and in some community, there is a strong belief that breast milk does not provide sufficient nutrition, water, and this in turn hampers exclusive breast-feeding practices.

Besides, study done in Jimma town revealed that most of the pregnant mothers (90.9%) intended to mixed feed their infants of age 0-6 months and 30.5% had sufficient

knowledge about infant feeding options recommended to HIV positive women. The lactating mother practiced mixed feeding 81%, exclusive breast-feeding13.4% and exclusive replacement feeding 0.4%. (Cherinet, 2005)

The mothers' infant feeding intention and practice in the context of HIV and nutrition might be risky as suboptimal breast-feeding practice is common. Exclusive breast-feeding is rare and where as early weaning with mixed type of feeding practice is common. Wet nursing is another breast-feeding practice that was revealed in the study which may expose an infant to contract HIV (Meselch, 2006).

Divergent View of the Literature

Various studies revealed that, Social support more broad in definition (such as a person social network i.e. the extended family neighbor, friends and others significant others) and it is recognized as a significant factor that influences the process of infant feeding practice. Unfortunately, the empiric literature lacks studies examining the exact nature of the relationship of social support and mothers' perceptions of their competence. Within the literature, there is a significant evidence for the role of familiar support influencing infant feeding practice of mothers. Yet, different studies associate mother's support system with the mother's disclosure of her HIV status and those disclosing their status get more support.

However, other studies showed that if she reveals her status, there is the risk of stigma and discrimination. According to Medley et al, 2004 study they found that partner disclosure often resulted disruption in family and adds evidence to a study done in Tanzania, which showed that mothers feared for their families social and economic future should they disclose their HIV status (Leshabari et al, 2007). It does however not conform to findings from studies done in other African countries, which maintain that partner disclosure brings about family support and improves adherence to infant feeding options.

I partially agree to the above argument since most women are economically dependent especially in our country, the social support mainly from their spouse is practically controversial.

Trend on Infant Feeding Strategy to reduce MTCT of HIV

International- There is a serious debate now underway regarding the feeding of infants by mothers who are HIV positive. Different recommendations have been proposed by WHO to deal with the issue, including

- WHO,UNAIDS and UNICEF issued a joint "HIV and Infant Feeding'' policy statement in may 1997 which is called "informed choice'' that mothers should be free to choose the method of infant feeding. (http://www2.hawail.edu/-Kent)
- In 1999 UN shifts its position announcing that it would discourage all women who are HIV positive from breast-feeding their babies. (http://www2.hawail.edu/-Kent)
- In Oct, 2000/2001 UN for a woman that has tested positive for HIV, and when replacement feeding is acceptable, feasible, affordable, sustainable, and safe, avoidance of all breastfeeding by HIV positive mothers is recommended. Otherwise, exclusive breastfeeding is recommended during the first months of life and discontinues as soon as possible. (As cited in MOH, 2004: P 42).
- In 2006 UN agencies (WHO, UNAIDS and UNICEF) emphasize on provision of appropriate counseling on infant feeding and support exclusive breast-feeding. The above statement articulates the issue from the human rights perspective.

National Studies

Ethiopia adopts the UN agencies breast-feeding strategies and guidelines.

- In 2002, the Ministry of Health published National PMTCT guideline.
- MOH 2004, develop National strategy for infant and young child feeding and the HIV positive mother has the following four main options for feeding her baby. Exclusive

breastfeeding by HIV positive mother, expressed heat-treated breast milk of HIV positive mother, Exclusive breastfeeding by wet-nurse who is HIV negative and Exclusive Replacement Feeding.

- In 2007, the Federal HIV/AIDS Prevention and Control Office (FHAPCO) updated PMTCT guideline that to provides appropriate counseling on infant feeding and support exclusive breast-feeding and Exclusive replacement feeding as alternative.

Despite the intervention of policy and strategy related to infant feeding, options is changed from time to time based on scientific findings and evidences and its applicability is questionable.

The Ethiopian demographic and health service (EDHS), prevention of mother to child transmission (PMTCT) survey and different studies on infant feeding pattern revealed that although prolonged breast-feeding is common, there are less exclusive breast-feeding practices. On the other hand, one of the national PMTCT strategies is provision of appropriate counseling on infant feeding and support exclusive breast-feeding.

Summary of Literature Review

The studies referred the above confirm the importance of counseling and informed choice of the mother on infant feeding practices in PMTCT of HIV prevention. These studies also show that infant feeding option is not straightforward; it is rather a complex processes. This is true but the question is, whether there is a mechanism to monitor or follow up the practice of HIV positive mother. Without close monitoring and encouraging mothers to do so, it is very difficult to guarantee using PMTCT service increases to practice the recommended infant feeding.

Besides that, the reviewed studies of different countries illustrate the variations of norms across cultures. Thus, recommended researches on breastfeeding and replacement feeding are critical, and must continue.

In short, the reviewed literature showed the complex nature of infant feeding in HIV era especially in developing countries, including Ethiopia. In addition to that, the implementation of UN/WHO recommended infant feeding guideline is not straightforward and easy in developing countries. This is also similar in our country where predominant breast-feeding is a norm, and which at the same time the cost of replacement feeding and the stigma attached to it hampers its feasibility. Currently exclusive breast-feeding seems the only window of opportunity to minimize the risk of postnatal HIV transmission in developing countries. Consequently, there is a need to conduct research on the mothers' practice of infant feeding, exploring the factors and implementation of their choices. This research will assess the infant feeding practice and adherence to the WHO recommended infant feeding options of HIV positive mother in the context of prevention of Mother to child transmission (PMTCT) of HIV and that is why it has become the focus of this study.

Conceptual Definition

Adherence - Practicing the recommended infant feeding strategies among HIV-infected women

Adherence to exclusive breast feeding - When a mother fed her child breast milk only for the first six month

Adherence to exclusive replacement feeding – When a mother fed her child formula/ modified cow milk for the first six month and able to prepare and dilute according to WHO guideline

Breast milk substitute- Any food being marketed or otherwise presented as partial or total replacement for breast milk, whether or not suitable for that purpose.

Breastfeeding-The child has received breast milk directly from the breast or expressed.

Complementary feeding- Giving any other food, whether manufactured or locally prepared, in addition to breast-feeding or infant formula.

Exclusive breastfeeding- Consuming only breast milk and not other liquids, milks, or solid foods except vitamins or prescribed medications

HIV positive Women – women who have taken an HIV test and whose results have been confirmed as positive and known to the individual that they are positive

Infant feeding - refers to the practice of mother to feed their child between birth and 12 months.

Infant feeding practices -Describes how the mothers fed their infants during or in the week/month prior to the study

Lactating mothers- HIV positive women who gave birth in the past 12 month of the study period (With in one year post partum).

Knowledge on MTCT of HIV-When the informant responds to the three periods of HIV transmission(During Pregnancy, delivery and breast feeding)

Mixed breastfeeding- Means giving a baby breast milk and artificial feeds, either formula or cow milk or cereal, or other food.

Predominant breastfeeding- The infant's predominant source of nourishment has been breast milk. However, the infant may also have received water or water-based drinks but not other milk products.

Replacement feeding -Infant who fed on commercial formula or home modified animal milk.

Conceptual Framework

A framework is a useful organizational tool, a synthetic framework that shows how HIV affects infant feeding practice. Thus, Mother-to-child HIV transmission includes factors that can be viewed from a medical perspective as well as the socio-economic and cultural factors that contribute to infant feeding practice and the vertical transmission of HIV.

In PMTCT programs addressing "root" factors of mother-to-child HIV transmission could be important at one end and focusing on the immediate situational factors is another approach. Certainly, these diverse approaches are not mutually exclusive. However, in order to have a coherent picture, what we need is a conceptual framework that encompasses all of the major factors that determine infant-feeding practices and its outcomes when failed to use the services.

Piwoz, Ellen G. (2004) stated that, conceptual model depicts the range of conditions that influence feeding decisions and their outcome (e.g., knowledge, perceptions, family influences, resources, environment, etc), and issues that need to be explored in order to define appropriate feeding options. The framework based on the UNICEF Model of Care depicts an ecological model, which assumes that feeding behaviors are influenced by interacting, intrapersonal, social and cultural, and physical environment variables.

- Intrapersonal- Refers the knowledge, beliefs and skill of women to safer infant feeding methods
- Interpersonal - Refers those factors that increase Mother to child transmission of HIV as a result of relationships a women's closest social circle such as family, friends, social network and health care provider
- Social and cultural - Influences are larger, macro-level factors that influence infant feeding practice such as gender inequality, cultural belief systems, societal norms, and economic or social policies. Social, cultural, and economic conditions have a significant measurable effect on health status and illness prevention.
- Physical environment- Clean water and sanitation, Health care availability, PMTCT service

The ecological model support a comprehensive public health approach that not only address individual risk and protective factors, but also the norms, beliefs, and social and economic system that contribute to the safer infant feeding practice.

Thus, to understand the infant feeding experience of HIV positive mothers, particularly exclusive infant feeding practice at Tikur Anbessa hospital PMTCT users, and the research was conducted based on the ecological model. As, Piwoz, E.G. explained this model cut-across the various aspects of acceptability, feasibility, affordability, sustainability, and safety of infant feeding practices.

METHODOLOGY

Study Area and Period

The study area was Tikur Anbsassa Hospital in Addis Ababa. Tikur Anbassa Hospital was established in 1973 and it is the biggest hospital in Ethiopia having 1,262 rooms for different services. At Tikur Anbassa hospital, PMTCT services encompass pre test and post-test counseling, follow-up during Pregnancy and single dose Nevirapine during labor for the mother as well as for the infant at birth. The hospital is chosen because it is the first health institution where PMTCT service for HIV positive mother was delivered through Nigat research project started in 2001. The study was conduct from March 2009 to May 2009.

Study Design

The study design was cross-sectional exploratory facility based using qualitative data collection methods.

In order to explore infant feeding experiences of HIV positive mothers in PMTCT programs in Tikur Anbassa hospital, a qualitative design was regarded as appropriate because of the contextual, emotional and sensitive nature of infant feeding for HIV positive mothers. The research questions required greater depth of response iterating not only mother's complex experiences on infant feeding but also the significance and meaning given to such experiences. The qualitative design is also characterized by holistic or comprehensive understanding of the social setting in which the research is done. Social life is viewed as contextual and 'dynamic' and commonly involving a series of events which must be grasped in order to explain the reality of everyday life.

The study used in-depth interview qualitative methods that aimed at getting greater depth of responses, as infant feeding is a complex and sensitive subject especially in PMTCT context. In-depth interviews are useful for obtaining information on private issues, on actual

feeding behaviors, and the underlying reasons attached to them. In-depth interviews may employ different types of questions and different approaches in soliciting information.

Study Population

The study population was HIV positive mothers of under one year old children selected from Tikur Anbassa postnatal clinic attendants in PMTCT and delivery services. The age range was chosen to enable the focus on both breast-feeding and replacement feeding practices.

Inclusion Criteria

Mothers were eligible if they are:

- HIV positive with children less than one year of age
- All reproductive age group exclusively practicing breast/replacement feed, and HIV positive mothers to their infants.
- Who are willing to participate
- Who gave birth in Addis Ababa and passed through PMTCT service in Tikur Anbessa hospital.

Informant Selection procedure

Recruitment of informants was done at the study site through the PMTCT nurses. Though it is difficult to fix exact number of informants in qualitative study, interviews with 14 HIV positive mothers was proposed with the aim of understanding Informants' experiences and challenges with the feeding aspect (both exclusive breast-feeding and exclusive replacement feeding).

Women who had been through voluntary counseling and testing and who had received an HIV-positive test result were informed about the study by a clinic nurse and, when they agreed to participate, they were introduced to the researcher. Purposive sampling (a method of selecting individuals with qualities of interest to the research question) was used to select

the first seven HIV-positive women who decided to formula-feed and the other seven HIV-positive women who intended to exclusive breast-feed. The study employed purposeful sampling. This type of sampling implies an intentional selection of informants with a wide range of variation on key characteristics of interest such as age, education, parity, religion, marriage, and choice of infant diet, within a defined criterion of inclusion. This type of sampling is also extremely useful in constructing a historical reality, describing phenomenon, or developing something about which only little is known (KumarR.1999: p.162).

The sample size of seven women in each feeding group was chosen to enable grasp different experiences of these feeding methods to be obtained from women within the site. The sample size can be increased if the information grasped from the interviews continues to be varied and different. The final sample size of 12 was determined after a review of the initial interview transcripts and once it was determined that no new information was being solicited taking into consideration of time and resource limitations. All the research ethical issues were discussed and agreed upon receiving informed written consent from each respondent.

Data Collection Instrument and Process

A qualitative research method was selected for this study with an intention of generating data rich in detail and embedded in context. The data collection instrument developed from the literature; some items from instruments used in previous studies were also adapted. Fourteen HIV positive mothers were planned for individual interviews; however, the sample reduced from fourteen to twelve. Redundancy of data was observed by the 8th interview, but 4 additional interviews were completed to ensure a description of the full experience. Nine HIV positive postnatal mothers who breastfed their infants (one mother change to replacement feeding at 3 month) and three HIV positive postnatal mothers who replacement fed their infants were interviewed.

All interviews were conducted with a semi -structured interview guide in order to enable informants to tell their stories in their own way. Semi -structured interview guide initially it was prepared in English language and then translated in to Amharic language for data collection process. Two different interview guides were used for the two different groups of informants: HIV positive mothers who breastfed their infants, and HIV positive mothers who replacement fed their infants.

The interview guide embraces data on socio-demographic and economic characteristics, knowledge, and beliefs about MTCT of HIV and PMTCT service, infant feeding, and their feeding decision and implementation. Great emphasis was given to explore factors, that could influence infant feeding experiences of early infant-feeding practices, and factors that enabled success in maintaining exclusive infant-feeding practices (including family involvement, disclosure, and health worker interactions).

Interview with the informant started following their introduction by the nurse counselor in a room where women support group are used and the in nurse's office to insure confidentiality. Then I started the discussion by asking informants simple social demographic questions to develop good rapport and to make informants feel at ease; then the interview continues based on the interview guide topics however, some questions are modified and paraphrased during the interview for better understanding of the informants. Moreover, throughout the interview, Non-verbal communication cues were observed and the informants were encouraged to give elaborate responses with minimal intervention from the researcher.

For Exclusive breast-feeding, several issues were explored. These include socio-demographic characteristics, breastfeeding initiation and techniques; exclusivity of breastfeeding; greatest emphasis was given to knowledge, attitudes, and practices; constraints and facilitating factors.

For Exclusive replacement feeding most questions, pertaining to availability and cost of preparing home and commercial infant formula; constraints and facilitating factors for safe implementation; and informants' opinions on AFASS was raised. The in-depth interview lasted forty minute to one hour.

Data Quality

The trustworthiness of the results was ensured by careful selection of informants with the assistance of Nurse Counselor, by establishing good rapport with study informants. To deal with informants' bias I intentionally tried to interview HIV positive mothers with different socio demographic backgrounds recording their ideas throughout the study. According to Maxwell (2005), in qualitative study there are two types of threats to validity (researcher bias and reactivity). Reactivity is the influence of the researcher on the setting or individuals studies; so that to reduce this, I conducted the interview in hospital setting by avoiding leading questions.

To minimize the researcher bias, I collected data using in-depth interview in order to get full picture of infant feeding practice, transcribing the interview verbatim identifying and analyzing discrepant data and seeking feedbacks from my colleagues. In addition, the interview guide was pre tested its convenience or interview flow, question clarity, and engendering missing or inappropriate information

Data Processing and Analysis

Data collection and analysis was undertaken simultaneously in line with the iterative nature of qualitative methods. I followed the thematic content method that involves transcription, translation, coding, categorization, and developing of themes and interpretation. This first involved listening to tape interview prior to transcription, transcribing verbatim then reading, and re-reading all the data sets in order to identify an initial set of themes as

well as for views or experiences that would be different or contradictory to the main emerging patterns.

I did the interview and transcription all by myself that enabled me to know the material I had gathered extremely well.

Transcription and Translation

All in-depth interviews were recorded with permission from the informants and were transcribed for analysis. All the interviews were first transcribed verbatim from the tape-recorded into Amharic. The Amharic transcripts were then translated into English. Once the data was transcribed and translated, I went through all the data transcripts and field notes so as to make sense out of the huge array of data by sorting and interpreting it.

Coding

According to Max Well,*'' The goal of qualitative coding process is not to count things, but rather to "fracture'' the data and arrange them into categories that facilitate comparison between things in the same category and that aid in the development of theoretical concepts.''* (Max Well, 2005:p96). Using transcribed material, terms or concepts that best summary capture unit of meaning in a given paragraph was written in the margins of the transcripts and then line-by-line manual coding was carried out.

Identification of Themes

Similar codes were brought together to form categories keeping the objective of the study, then drive recurrent themes concerning infant feeding in order to determine common characteristics of women and enabling factors, personal and environmental, which contributed to exclusive infant feeding. The researcher after carefully examining relationships among codes and categories, the following emerging core themes were identified: Situation of exclusive infant feeding practice, Barriers to exclusive infant feeding, Coping Strategy of informants and Informants' (HIV positive women) and perception towards PMTCT Service.

Data analysis were conducted manually by using developing categories and themes, conclusion through connecting to existing literature and integration of concepts. All the raw and coded material were kept in a safe place to ensure their confidentiality and safety.

Ethical Consideration

Infant feeding and HIV is a highly sensitive issue raising many ethical concerns. Informants have their ethical principles that should be protected during the course of this research study. Ethical consideration is mainly focus on:

a. *Protecting the Informants from Risk*

Protecting risk to the informants insures protecting the informants' human rights and applying social work ethics. Further, attempt done to avoid discrimination of informants based on their ethnicity or social class.

The right to self-determination-This was ensured through informing informants about the study proposal and their expected participation, allowing them to voluntarily choose to participate without fear of coercion or manipulation from the primary investigator or staff members of the Tikur Anbassa Hospital. The informants have the right to withdraw from the study at any time without penalty.

Freedom from harm- Each informant in the research study has the right to freedom from harm. This includes freedom from physical, psychological, and economic harm.

Every eligible informant was given the opportunity to participate in this study without risk of physical harm as this study used in depth interview. Each informants was also be protected from psychological harm, as they had the right to refuse to participate without fear of prejudice or jeopardizing their relationship with the staff members at Tikur Ambassa hospital. The informants had the opportunity to ask questions during the interview time and receive enough response as the primary research investigator conducted the interview.

The right to privacy- The informants were allowed to determine the time, extent, and general circumstances under which private information is shared. In this research, protecting informants' privacy involved carrying out interviews in a private location where informants felt safe to express themselves

Confidentiality- Confidentiality was ensured in a way that; question lists are not numbered and cannot be traced back to informants, and neither information obtained was used for any other purpose other than this study. This was achieved by making sure that all transcribing material was kept in a password-protecting computer. During the interviews, informants introduced themselves using pseudo- name and the voice recorder was kept out of reach of others.

b. *Balancing Benefits and Risks of Study*

The benefit of this study, that the infant feeding practice of HIV positive mothers and their knowledge and attitude towards exclusive infant feeding, was described and explored to assist the counselors', PMTCT program coordinators in supporting HIV positive mothers more effectively. Moreover, Refreshments and compensation for travel was provided following each discussion.

The risk of the study was, since HIV is a sensitive issue that it might cause temporary discomfort similar to what the informant would experience in her life and hope that it would cease after completion of the interview.

c. Consent Process

Informed written consent was obtained from the study informants, following an explanation about the purpose of the interview and on what would be expected of them. Issues related to confidentiality and any potential risk and benefits from participation in the study was discussed. In addition, informants were informed that participation is voluntary and

that they could withdraw any time without any precondition. Anonymity was guaranteed to protect the identity of the person and to maintain confidentiality (See Annex 2).

d. Permission obtained from ethical committees of the School and study area

Before the study began, ethical clearance were obtained from Ethical Clearance Committee of the Graduate School of Social Work, Addis Ababa University after presenting and defending the proposal and permission to study sites were gathered from the Addis Ababa University Medical Faculty Obstetrics and Gynecology department.

LIMITATION AND DELIMITATION OF THE STUDY

Limitation of the Study

The study mainly depends on self-report of mothers on their infant feeding practice; this might be prone to social desirability and recall bias. Besides, there could be challenge in following up of those mothers interviewed during their postnatal visit. It would have been productive to include home visits to explore the infant feeding situations of the informants. Furthermore, as the nature of qualitative researches and due to time and resource, constraints number of participants has limited and this decreases the generalizablity of the finding.

Delimitation of the Study

Initially, this study confined itself to interviewing HIV positive postnatal mother in Tikur Anbassa Hospital, Addis Ababa.

FINDING AND DISCUSION

This chapter includes the presentation of findings related to the research question described in previous chapters. The results are condensed and presented in the following subtopics.

4.1 BACKGROUND CHARACTERSTICS OF THE INFORMANTS

The mothers who took part in this study were in the age range between 25 and 40, having 1-6 children who came from different parts of Addis Ababa town. Only two of them had managed to finish high school. Three mothers had never had any formal education at all. Most of the mothers were followers of Orthodox Christianity while one was a Muslim. The majorities of the mothers were either are housewives or involved in informal employment '*Gulet*' outside their home areas.

All of the informants were ever married. Out of them majority of the informants were currently married, and the remaining three were divorced. The main reason for their divorce was to disclosure of their HIV status. All except two informants knew their status before pregnancy; they knew their HIV status during the ANC follow up. Four of informants were on antiretroviral therapy (ART) and breast-fed their children while the rest of informants used prophylactic antiretroviral (ARV) drug to them and their infants too.

Table 1:-Basic socio demographic characteristics of the study informants

Informants	Age	Education	Occupation	Marital Status	Religion	Ethnic	Income	Parity
A	40	Able to write	Housewife	Divorced	Orthodox	Oromo	200	6
B	30	12th grade	Housewife	Married	Orthodox	Oromo	1200	1
C	28	8th grade	Housewife	Divorced	Orthodox	Amhara	150	3
D	27	10th	Waiter	Separate	Orthodox	Gurage	130	2
E	32	12grade	petty trade	Married	Orthodox	Amhara	485	2
F	30	8th	Housewife	Married	Orthodox	Gurage	400	4
G	35	6th	Housewife	Married	Orthodox	Amhara	300	2
H	30	6th	Housewife	Married	Orthodox	Gurage	120	3
I	31	8th	Housewife	Married	Orthodox	Oromo	200	3
J	27	4th	Housewife	Married	Orthodox	Gurage	500	1
K	25	Illiterate	Housewife	Married	Orthodox	Gurage	160	3
L	26	7th	Housewife	Married	Muslim	Amhara	150	3

4.2 Situation of Exclusive infant feeding practices

4.2.1 Experience of Exclusive Breast-feeding

Most of the informants chose this method due to economic reason even if they were not happy in using it for fear of HIV transmission to their child. One informant said, the suspicion for the fear of breast milk transmits HIV/AIDS is further aggravated when they are forced to do so by health professionals. Another informant said:

> This is my third child, I lost my first child due to HIV/AIDS because the discrimination we faced from our neighbors, as a result, we were forced leave the village, & currently we live 'Entoto holly water'. So because I have such bad experience & suffer more, I & my husband decide to raise with cow milk however, after delivery the nurse strongly forced me to give breast milk without convincing me at that time, I felt bad & worried until I know my child's sero status. However, now I am happy my child is free from HIV.

However, two mothers choose EBF because of their experience that they have HIV free children while using this method.

Predominant breast-feeding is a customary feeding that it is difficult to resist making exclusive breast-feeding. The pressure comes from family members, neighbors, & friends. Hence, except few of EBF users who experience expressed milk, most of the women carry their children wherever they go and they do not want to leave at home, because someone may give them water and lead them to mixed feeding.

Most of breastfed mothers, the first liquid given to their child from birth was breast milk. However, one family member of one of the informant gave boiled water to one infant while the woman was hospitalized for a caesarian section.

Majority of the informants believe that breast milk has adequate nutrition & is sufficient to the baby for the first 6-month duration. On the other hand, one EBF mother explains her worry that breast milk is not sufficient & additional (complementary) food is needed.

Most of mothers stopped breastfeeding during the interview. This is because the mothers were HIV positive and learn to stop at six month were reported as the main reason for stopping breastfeeding and insufficient milk production was reported by one informant.

The large majority of informants had disclosed their HIV status to at least one person. The mothers disclosed their HIV status either to their husbands, family members or to their friends. The common reason for disclosure of their status to their husbands, family member, and friends was due to the advice of counselors, to get economic support (those choose replacement feeding) and to encourage their friends in order to save their children respectively. Three mothers did not disclose their HIV status to anyone.

Concerning age, parity, and disclosure status of HIV positive mothers there was no major difference between breast-fed mother and those who planned to formula-feed.

Out of nine EBF users only two of them experienced with expressed breast milk while the rest of informants were not practicing expressed milk due to fear of mixed feeding by their family members so that they carry their children when they go out of home.

The study has found out that nine EBF, six of them properly implemented EBF up to 6 month and the remaining three, one mother has switched to ERF at 3 month due to insufficient milk; one mother used mixed feeding at 5 month & the third mother continued to breast feed up to 8 month. This shows that EBF implemented by the majority of the informants.

In addition, all the informants who choose EBF seek medical help for cracked nipple and this shows their level of understanding on MTCT of HIV through cracked nipple.

4.2.2. Experience of Exclusive Replacement Feeding

In Ethiopia, breast-feeding is the predominant infant feeding method. Women who did not breastfed their children or who discontinued early, suspicion arises about the mother's sero status.

Three mothers of the twelve HIV positive mothers interviewed chose exclusive replacement feeding. Among the three, two of them chose cow milk and the rest one chose formula milk. Two of them left their job to raise their children. All the mothers who chose formula/cow mentioned that replacement feeding is time consuming and difficult to prepare. So that this requires not only the commitment of the mothers but also the family especially of the spouses since they missed the income that generate by the women.

Moreover, the current study reveals that a woman who decides not to BF is labeled as HIV infected & ostracized by her friends and neighbors. According to the informant, stigma & discrimination related to HIV is explained in different way such as ostracized by the communities and isolation of children.

Hence, Stigma & discrimination discourages the adoption of recommended exclusive infant feeding practices. One informant suggests that, it needs to work hard on stigma & discrimination at community level in order to raise community awareness and thereby to strengthen the social support for HIV positive women so that they can adhere to the safer infant feeding practices. Further, the finding reveals that all informants who disclosed their HIV status and are supported either by their partner or by family.

4.3 Barriers to Exclusive Infant Feeding

Regarding the factors that affect positively or hinder exclusive infant feeding, the study informants mentioned several factors, from their own experience, in relation to adherence issue.

4.3.1. Psychosocial factors

The study informants distinguished a number of psychosocial problems. Fear of disclosure, the role of community, partner, and family support as the major factors affecting HIV positive women's exclusive infant feeding practices according to the study finding.

i. Fear of disclosure

As far as disclosure of HIV status is concerned, the informants have stated that the existing stigma and discrimination is an important challenge. Despite the changing phenomenon, stigma and discrimination is ebbing from time to time, it still lurks widely hindering them from disclosing themselves. This is because participant believe that disclosing to the family ,community members can result them in ending up in divorce, shattering social relation, forcing them leave their rented house(for those live in rent house) and other myriads of negative sequels.

Hence, while these women hide to reveal to their family or neighbor they face difficulty to stick to exclusive infant feeding practice, as people keep them asking why they do not practice mixed feeding. A mother who uses exclusive replacement feeding said:

> From the reaction of the community it is realized that 'not breast-feeding is a curse' because everybody asks why do not you breast-feed your child. Especially if you do not disclose your HIV status, the pressure from the family member is worse. And some part of the society especially elder women considers the woman as if she is not a good mother thinking that she wants keep her shape and looks attractive.

It is noticeable that HIV positive mother with exclusive infant feeding practice is on verge of a complicated problem putting the life of infants in danger.

Nevertheless, another emerging situation is that this finding has detected exclusive infant feeding is becoming an implicit indicator for community members of telling a women's HIV status.

It is true that HIV/AIDS education, including PMTCT, is frequently conducted using different communication channels such as radio, Newsletter, community dialogue, household education. Hence, community awareness about exclusive breast feeding, exclusive replacement feeding has improved according to the participant this leads members to label as HIV positive whenever they see a women avoiding mixed feeding. Which of course is another problem for the mother as it puts a psychological pressure on her for fear of being ambushed or not. An experience of EBF mother described:

> Before six month while I was feeding my child, using EBF a neighbor woman had come to visit me and we were discussing about my health .To remind you I only disclosed to my husband and he left me out. When I was breastfeeding my baby, she was insisting me to give him water but I refused. This woman developed a suspicion over my situation, giving her knowledge of EBF for HIV positive women, and the next day she followed me secretly while I was going to Alert hospital where I get ART service and found out that I am client there. Umm… after few days, everyone in my neighborhood knew my status and instantly they shattered contact with my child and me and thus faced ostracitization.

This study further reveals that the fear of disclosure is the threat to both EBF and ERF but it is much worsened in ERF, as it is not the accustomed norm of the community.
To summarize fear of disclosure, aggravated by numerous factors, creates difficulty on the adherence of mother to exclusive feeding practice as community pressure for mixed feeding (in the absence of their cognizance to mother's HIV status) leads to endanger the health of

infants and the wellbeing of the mother. Similarly increased community knowledge about PMTCT in general and exclusive feeding practice as a method to reduce post natal MTCT of HIV, implicitly allowing persons to know a mother HIV status undermines her voluntary initiation of disclosure.

4.3.2. Economic condition of the mother

Most of the study informants are from lower economic status. Economic background of the mother is an important characteristic that determines the choice of infant feeding practice. Based on this most of the participant s are practicing EBF even if their primary choice is ERF. This is because their economic capacity does not allow them to choose for ERF.

Most of the informants do not have a job, their income source is mainly from their husband, and this affects the infant feeding choice and implementation. Thus, it seems that women do not have an option to choose. As EBF practicing mother said,

> I choose EBF, otherwise what other choice could I have. As to my understanding, this is not a choice; it is rather mandatory.

Among the 12 informants, only three of them choose ERF and economy is the major reason given by EBF practitioner. Similarly, ERF practiced mothers also revealed this :

> I choose cow milk to avoid transmission of HIV through breast milk. So after I discussed with my mom and husband, my mom insisted me to use cow milk and she promised me to cover the cost ,unfortunately, my mom died, and I do not want to put my child in danger but I tell you it is hard to practice. The cost is not affordable especially as the child grows up he needs more.

On the contrary, planned birth is another important point considering adherence to the issue. One of the informants have gone far to save the income of "lada" taxi exclusively to be used to cover the purchase of formula milk. As a result, they have successfully managed to

afford till the desired time line for replacement infant feeding. This tells that when there is good preparation during pregnancy or even before for the best health of the child the effectiveness to adhere will increase. Formula fed mother explained in this way:

> My husband and I knew our HIV status before nine years. Both of us had a job, he was heavy truck driver and I was a government employee. We had a plan to have child so that we saved money and bought 'Lada Taxi' we earned 60 birr per day. I used all the money that came from the taxi to raise my child, you know I used to buy tin formula milk every three day and I used 12 feeding bottles daily. Choosing formula milk is not simple; it needs time, money, and skill to prepare. I quitted my job to raise my child. She laughed… and told me that they called their baby 'the lada lady' and said that thanks to God she is free from HIV.''

Cultural factors

Cultural feeding beliefs influence how mothers choose to nourish their infants and commonly regarded as truths by women. Cultural feeding beliefs have caused resistance towards the national and international feeding recommendations from health care organizations and government agencies.

All informants, regardless of infant feeding method they choose, they considered that exclusive breastfeeding is more advantageous than formula feeding. However, one of the cow milk user women informed the negative effect of breast milk in risk of HIV transmission through breastfeeding.

Majority of the informants were able to make their own decision to follow the recommended infant feeding method either by discussing with their partner / families and agreed on the method or due to divorced (three of them).

Despite prevention of mother-to-child transmission PMTCT programs, very early mixed-feeding remains a norm; traditional conceptualizations of 'breast-milk as salty' are holding up against current PMTCT education. According to different studies, exclusively breastfed infants in developing countries are at lower risk of HIV transmission than mixed fed infants.

From the informants' view prolonged breast-feeding, giving water to the baby while breast feeding, early initiation of complementary food and mixing breast milk and cow milk are common. Few of them mention that swallowing butter as prelaceteal feeds before initiation of breast milk is also practiced.

Concerning the strong cultural practice that affects exclusive breast-feeding the belief that breast milk contains salt, baby feels thirsty unless water is not given for the baby and considering the mother who do not do so as careless mother are common one. Due to this reason, the reaction of the family and community towards exclusive breast-feeding is negative.

One of the informants explained in this way

> Currently use of exclusive breast-feeding in reducing MTCT of HIV is taught in antenatal clinic and disseminated through media widely. So that when a mother practices EBF the neighbors and friends level her as HIV positive and discriminate against her. (EBF mother)

Similarly, another informant stated that

> ''You know exclusive breast-feeding is not a customary feeding practice in our community, I heard about it from counselors in antenatal clinic. Besides, traditionally most of mothers gave '*Yetena adam weha'* (traditional medicine, herbs boil with water) to their children believing that it treats abdominal pain.

> Thus, when a mother fails to do so, the family member and neighbors suspect her as HIV positive.''

Another mother who practices replacement feeding also shares the concern of EBF mothers since breast- feeding is considered as one desirable sign of motherhood.
As the informant stated,

> Because I used cow milk to my child; one of my neighbor (elder women) perceived me as selfish and careless to my child wanting to keep my figure.'' She continues ''from our tradition I see motherhood from two angles, a women should give birth in a natural way and breastfed her child. Unfortunately, I miss both because of my HIV status'' (30years old mother practicing cow milk)

4.3.3. Individual factors

From the study, factors determined that affect EBF duration include previous experience, maternal breast-feeding confidence, pressure from significant other, and insufficient breast milk.

Regarding the knowledge about MTCT of HIV positive mothers, most of the informant mentioned MTCT can occur during pregnancy, labor, breast-feeding, and one among others said that MTCT can occur during delivery only. The rest four of the informant mentioned sexual intercourse, menstruation, poor hygiene, and cracked nipple as additional means for MTCT than the above reason.

The duration of breast-feeding varied from 3 month (1/9), up to 8-month (1/9) and majority of women stop at 6 month. The main reason of those women who do not follow the WHO recommendation that is exclusive breast-feeding up to six month is that, due to insufficient breast milk. Among the two, one women decided to stop at 3 month after

discussing with the health professionals whereas, the other woman kept giving mixed feeding to her baby without telling to the counselors.

As the mother who stopped BF at 3 month mentioned:

> "My breast milk was decreasing from time to time and the baby was not getting enough milk and crying continuously then I reported to the health worker and after observing the situation… I switched to cow milk.''

Prolonged breast-feeding increases the chance of MTCT of HIV. In order to minimize the risk of HIV transmission, breast-feeding should be discontinued at six months. However all mothers may not practice it successfully. There is a difficulty to stop breast-feeding at 6 month; infants may not adopt bottle-feeding immediately. One of the informants vividly said:

> When my baby reached six months, I tried to stop BF as I was told by the counselor and soon after started cow milk. However, my baby was not willing to feed the bottle and I tried many times. I was frustrated and confused & felt in dilemma ,if I continued breast-feeding the chance of acquiring HIV would increase, if not I might lost my baby due to hunger. Later I decided to continue breast-feeding up to 8 month until he was well acquainted with the bottle-feeding

The EBF mother's view is also shared by exclusive replacement feeding users. As women who use cow milk revealed that unlike breast-milk, cow milk is not a ready-made and easily accessible she explains:

> One day I forgot to put the cow milk in the refrigerator and when my child wanted to feed during nighttime, I boiled the milk but it was spoiled…my child continued to crying so I gave him my breast but unfortunately, the baby was not willing to suck.

In addition, from the ERF participants, the preparation issue is the major challenge especially for those used cow milk. Those two of the ERF use cow milk where as they prepare it differently and not as per the recommendation. According to one informant, she used to prepare the cow milk properly but she felt that it was more diluted. Due to this, she did not add water to the milk believing that she already bought diluted milk. Whereas, the other informant stated that she bought one liter of milk per day (cost is covered by one NGO). As the child grew up, she added more water to satisfy her child's demand.

Questions regarding the enabling and hindering factors to practice in EIF were also discussed to know the perception of mothers and the majority of the informants mention the following: enabling factor for EIF the self-confidence and commitment of the mother, previous experience, emotional support from partner and family members, and the ability of mother to resist challenge. In contrast, the cultural belief in infant feeding, the pressure from partner, family, and neighbor, the economical dependency of the mother, disclosure, and cracked nipple, availability of cow milk as needed, and affordability of cow milk are some of the factors raised by the informant as hindering factors.

4.4 Coping Strategy of informants

HIV positive mothers face challenges while they are practicing safe infant feeding methods and yet, most of the study participant, adhere to exclusive infant feeding method. Exclusive replacement fed mothers face difficult situation for fear of being ambushed their sero positive by neighbor and family. In an effort to cope with this some of them pretend, when visitors arrived their house, attaching their breast closely to the mouth of the infant.

Most of the EBF mothers copes the challenge they face form family member with mixed feeding in different ways. The majority of them carry their children with them wherever they go and few of them by disclosing their status to the family members that support them in child rearing especially when the mothers leave home.

One EBF explained in this way, she practiced EBF up to six month mainly because of the commitment that she have to has a healthy child and her previous experience on breast-feeding. Another participant also added that

> Adhering to ERF is very much challenging to the mother. Unless the mother is strong enough and emotionally well prepared to tolerate the pressure and stigma, she may expose her child to HIV. I know a mother who were in Nigat project with me and fed formula milk to her child. She did not disclose her status due to this, she gave her breast in front of her husband's relatives, and HIV affected her child. She regrets and blames herself while looking her child suffering from disease.

The very basic essence of coping strategy is the mother's ambition to have HIV free child.

4.5 Informants perception towards PMTCT Service

From the interviews, almost all informants (all except one) reply that the health care providers, particularly the counselors have good attitudes towards HIV positive women. They guide HIV positive women on how to prepare replacement infant feeding, educate them how to take care and give breast, and empathize with them to develop a confidence. Therefore, it has an implication that the client HIV positive women can develop trustworthiness to the service and also attain the health seeking behavior of pregnant mother in the community.

Asked about their suggestion on PMTCT service, most of the informants found that PMTCT service currently provided is too relevant and pertinent to the HIV positive women as well as to their children. They proposed that, it is mandatory to scale up the service towards the remote areas in order to make it accessible for all pregnant women. As one of the informant mentioned:

> I got three children after learned that I am HIV positive. I benefited from PMTCT service a lot and I saved my 3 children from MTCT of HIV, given

> that I used prophylactic ART and strictly applying EBF. My husband and nephew only knew that I have HIV, but later I decided to disclose myself to one of my neighbors who had the sign of HIV like what I have in order to use PMTCT service and to benefit from it, then she used and benefited by just getting HIV negative baby. Here now she thanks me on the favor of it.

One of the informant said that the PMTCT service should strengthen and organized (expanded) at the grass root level in which the extent of adherence is monitored and controlled along supporting mothers in upgrading their adherence to exclusive infant feeding. The majority supported this idea, except three out of 12. Two of them restrained to give any suggestion other than their satisfaction where as the third informant expressed her disappointment on the infant feeding decision made by the health care provider, without her consent.

DISCUSSION

This part discusses the research findings in line with the major themes and in relation to other findings from similar studies. The themes are situation of infant feeding practice, the reasons for non-adherence of safer infant feeding, perception of informants towards PMTCT service and their coping strategies.

An attempt was made to minimize information bias that could arise on the question related to exclusive infant feeding by assuring the informants privacy and confidentiality of the information so as to make them feel free and tell the truth. However, the issue addressed in the study would not be expected to be honestly responded by every informant because of the sensitive nature of the subject matter investigated and the less likelihood of the informants to report the use of mixed feeding that increase the chance of HIV transmission because of perceived unacceptability of non- adherent behavior. Furthermore, the method of

study used lacks the generalization of the study finding. Therefore, it is with the appreciation of these limitations that the result of this study is interpreted.

Situation of Exclusive Infant Feeding Practice

In relation to the breastfeeding practice of informants, several issues were explored, including breastfeeding initiation, exclusivity of breastfeeding and issues around early cessation of breast-feeding. Due emphasis is given to knowledge, attitudes, and practices; and to hindering and facilitating factors for infant feeding options.

Related to infant feeding decision, the findings of this research shows that both factors that are related to the mother and to the social environment affect decisions of the mother on infant feeding. Most of the informants were able to make the decision concerning their infant feeding choices independently, but in the cases of few of the informants, either their partner or health care providers influenced their decision.

This finding goes with the study done in Harar in which majority of mothers decided the feeding method by themselves and in contrast to the study done in Jimma town that showed that majority decision makers on infant feeding option are husbands followed by mother and mother in low.

Understood from this study was that, HIV positive mothers attending PMTCT clinics were more inclined to breastfeed exclusively for six months than feed formula their infants. This is in line with the global infant feeding policy and national PMTCT guideline that stated EBF is recommended for the first 6 months of life, and continuing complementary food is recommended for the first 2 years and beyond (HAPCO, 2007) which usually promoted at PMTCT services.

This study also demonstrates that, although most of the informants thought BF was not a better option for their babies' health, most of them opted for BF due to financial constraints. Similarly, many studies related the preference of mothers to BF to economic

reasons. For instance, XV International AIDS Conference at Bangkok (2004) indicated that mothers practiced exclusive breastfeeding because they could not afford the alternatives. A sample of South African mothers of unknown HIV status said they practiced exclusive breastfeeding by default because they could not afford other milks (Chopra et al, 2000).

On the other hand, those informants choose to feed formula/cow milk rather than breastfeeding their babies, shows a strong commitment to adhering to replacement feeding in spite of the stigma attached to not breast feeding an infant.

The current finding seems to be encouraging. The improvement may be related to the increased efforts made to promote exclusive breastfeeding, the positive impact of the counseling service and mother support group. Further, majority of EBF user informants who introduced breastfeeding immediately after birth could be an indication of the impact of the PMTCT program and the effect of counseling services.

This study is in harmony with a finding of a study done in Zambia. The consecutive surveys in Zambia between 2000 and 2002 showed that prevalence and duration of exclusive breastfeeding increased with counseling during ANC visits and post HIV-testing (AED/Linkages, 2002). The improvement can also be explained by the fact that other studies were conducted amongst all population groups, broader levels of socio economic status and the fact that data on exclusive breastfeeding rates were not disaggregated according to HIV sero status.

However, it is inconsistent with other African studies including Ethiopia. Study in Zimbabwe, Botswana reported that exclusive breast-feeding was difficult to achieve beyond five month (Chitsike, 2000 and Shapiro et al, 2003). Similarly studies done in Addis Ababa Jimma town and Harar showed 32%, 6.95%, 13.4%, and rare respectively exclusive breast-feeding rate for the first 4-6 months (Kesela et al.1996, Biruk.2002, Cherenet, 2005 and Meselech, 2006).

Regarding initiation of breast-feeding of EBF user informants, this study reveals that almost all informant initiate breast-feeding with in the first hour of delivery. This could be related to place of delivery that the majority of informants delivered in health institution particularly in Tikur Anbassa hospital that might give an opportunity for early initiation of breast-feeding. As the health worker always advice a mother to early breast-feeding and EBF as per the 2007 national PMTCT guide line.

For replacement feeding, issues in relation to availability, accessibility, and cost of preparing cow milk and infant formula were the hindering and facilitating factors for safe implementation. Therefore, the issue of Affordability, Feasibility, Accessibility, Sustainability, and Safe (AFASS) is put at the heart of infant feeding choice.

For those informants who choose replacement feeding, the main reason to make that choice was to avoid postnatal transmission through breast-feeding. Mothers' fear of transmission may associate from the infant feeding counseling itself before introduction of 2006 infant feeding strategy , the counseling mainly focus on replacement feeding if the women fulfill the AFASS criteria and if the women do not fulfill the criteria to choose exclusive breast feeding.

This finding is supported by other studies. The evidence from South Africa and Tanzania studies indicates that when antenatal women first learn they are HIV-positive, many state that they tend to use replacement feeding instead of breastfeeding. Some mothers believe that all babies of HIV-positive mothers will be infected, and some completely avoid breastfeeding to reduce the risk (in South Africa: Rollins et al, 2002 and Seidel et al, 2000; in Tanzania: de Paoli et al, 2000).

This study also reveals that the entire informants despite their choice, fed their infant on demand. Similarly, in a LINKAGE project formative research (2003) in Ethiopia, the

infants are generally breast-fed on demand unless mothers happen to be away, which is normatively supported and positively practiced.

Barriers to Exclusive Infant Feeding

The most important issue in women on exclusive infant feeding practice is the issue of adherence. Without good adherence, an infant will be exposed to HIV/AIDS. For instance, if a mother gives mixed feeding, it will increase the chance of MTCT of HIV to the infant. Various studies show that scale up of PMTCT services in general and improved adherence to safe feeding practices in particular can be attained if factors affecting the choice of feeding of mothers are identified and appropriate interventions are put in place. Accordingly, this study seeks to identify such factors and suggests possible interventions for improving mothers' adherence to safer infant feeding practice.

Economic condition of mother

To begin with, it is worth asking what underlines economic constraints and the reason why the women fail to adhere. Most of women's are economically dependent on others; their decision-making power is low in knowing their HIV status and in choosing infant feeding method. Given this, most of the informants in the study were housewives, the breadwinners of their household are the men, and this may create power imbalance in relation to their marriage stability especially after disclosing their HIV positive status and the ability to choose feeding practice. Hence, even if the informants have adequate knowledge on MTCT of HIV and though they are capable of choosing the safer infant feeding methods, the fact that they are economically dependent on others affects their choice or their ability to adhere to the feeding method they chose, because of this most of the informants chosen EBF.

This study also reveals that, there is higher adherence to EBF as compared to ERF, mainly due to the effect of counseling and financial constraints to buy alternative food such as cow and formula milk. Similarly another study conducted in Zimbabwe (Piwoz *et al*,

2005) shows that the rates of exclusive breastfeeding practices have reportedly improved following educational programs and a combination of group and individual counseling that led to a more than fivefold increase in the prevalence of exclusive breastfeeding respectively. Nevertheless, a clinical trial in Ethiopia (Abashawl et al.) designed to evaluate the efficacy of ARVs in preventing HIV through breastfeeding followed breastfeeding and non-breastfeeding sero positive women. The researchers found out that less than half (137/293) of infants who were breastfed in the first week of life were exclusively breastfed. Of the 166 infants who had been breastfed at all, 16% were weaned by two weeks, and 66% by 4 months. (Int Conf AIDS, 2004).

This variation occurs because the study was prospective in nature and the follow up was limited (up to) 6 month. Whereas, the result of this study is from the general population (not clinical trial), and included mothers with infant up to the age of 11 months.

Those ERF chosen informant fail to adhere due to shortage of money to buy the chosen food, lack of skill to prepare and availability issue whilst, planned birth is an important positive factor to adherence in ERF.

Cultural factors

Traditional beliefs and practices play a vital role in the upbringing of the child. This study revealed that mothers found it difficult to stick to exclusive breast-feeding in a culture where predominant breast-feeding, extended breast feeding, early initiation of complementary feeding and use of traditional medicines were the established norm of child rearing. One of the commonly used practices is '*Tena adam woha*'; is a mixture of herbs and boiled water used as medicine to prevent and cure abdominal pain of the infant.
Similarly, findings of other studies done in Ethiopia (EDHS, 2005 and LINKAGE (2003) shows that Breast-feeding is nearly universal in Ethiopia, and the median duration of any breast-feeding is long (25.8 months) where as exclusive breast-feeding is relatively short with

a median duration of 2.1 months. Contrary to WHO recommendation, only around one in three children age 4-5 months is exclusive breast-feeding and the Linkage study revealed, complementary foods and milk are given before six months of age and in some community, there is a strong belief that breast milk does not provide sufficient nutrition, water, and this in turn adversely affects exclusive breast-feeding practices.

However, a positive finding of this research is that many HIV-positive mothers shortened breastfeeding duration and adhered to exclusive infant feeding. As a result, when all of the informants' children underwent HIV screening, they all have sero negative results. In addition, there are courageous HIV positive women who disclosed their HIV status to avert the consequence of MTCT of HIV to the infant, despite the possible stigma.
Based on the findings of this research, compared to ERF it can be concluded that exclusive breast-feeding is feasible infant feeding alternative to help prevent vertical HIV transmission in Ethiopia than exclusive replacement feeding. However, a lot has to be done to maximize its acceptability since the prevailing cultural norms (predominant breast-feeding and mixed feeding) make it more challenging to practice exclusive breast-feeding ,as, stigma and discrimination attached to exclusive breast-feeding still exists.

Psychosocial factors

Both positive and negative consequences of disclosure are seen in this study. Majority of the informants disclosed their status to one or two persons, mainly to their partner and few of the informants also share their status to their family member. As a result, most of the informants get support from their husband and family members; while three of the informants get divorced and separated because of disclosure. Furthermore, strong family support seems to increase the adherence of the women to a certain feeding method and enhance the self-confidence of HIV positive mothers.

Strong belief in the advantages of breast-feeding, having someone at home to whom the mother had disclosed her status, the presence of family member who support her feeding choice, and not being away from home and the baby are the major factors associated with successful EBF. Furthermore, the finding reveals that those women who disclosed their status and whom their partners and families are supporting adhere more strictly to infant feeding methods, and this in turn is reduced MTCT of HIV.

Similarly, literatures also reveal the pro and cons of disclosure. Disclosure of HIV test results to a sexual partner is an important prevention goal for a number of reasons. The benefits include expanding the circle of helping people, as professional care providers, who provide access for care and support programs, plan future care for PLWHA and their partners, can be supported by close family members and friends.
Another benefit lies in assisting HIV infected women to plan for their future and partners to gain access and adhere to ART and replacement feeding for infants (WHO, 2001).

Along with these benefits, however, there are a number of potential risks for HIV infected women in relation to disclosure. This includes loss of economic support, blame, abandonment, physical and emotional abuse, divorce, discrimination, and stigma as well as loss of custody of children and property (Peter et *al,* 2001 and UN AIDS, 2002).

From this, one can comprehend that for majority of informants disclosure begets them support from partner & family members. Although disclosure should be encouraged, the women should also have adequate skill on how to disclose. This is because those mothers who disclosed their status to their partners and family members had a more stable emotional life and social support.

Since the predominant infant feeding method in Ethiopia is breast-feeding, women who did not breastfeed their children or who discontinued early are usually suspected of having HIV /AIDS. Due to this reason, from the study informants, a woman who decided not

to BF is labeled as HIV infected & ostracized by her community. Further, in this study stigma and discrimination related to HIV are explained in different ways ostracized by the communities and isolate their children.

According to UN commission on human right resolution, discriminating a person based on mere HIV/AIDS status is prohibited. It is also clearly stated in the 1998 Ethiopia HIV policy, article 5 "people living with HIV/AIDS shall have the right to live where ever they want to and shall not be subjected to any forms of restrictions.''

However, the study shows that even though stigma & discrimination seems to decrease, the human rights of HIV positive women are still being violated, they are still facing difficulty in relation to renting houses and they and their children are being isolated. Due to this, even though HIV positive women are encouraged to share their HIV status to others, disclosure is a very difficult decision for them.

Individual factors

At individual level, this finding reveals that factors that affect adherence to EIF are psychosocial, environmental, stigma, the perceived ability of mothers to implement exclusive infant feeding as instructed, social support net work, previous experience, and attitude towards efficacy of exclusive infant feeding and availability of cow milk.

Furthermore, the difficulty of replacement feeding apart from economical challenge to afford the cost of cow milk, variation in preparation of cow milk is seen in this study. Other studies done in Zambia (Omari et al, 2000) also in line with this finding in that preparation of modified animal milk was thought to be too complicated for some women in the study.

From the above statement, one can realize that the issue of proper dilution as the WHO recommended, which is diluting one liter of milk with half a liter of water, appeared to be beyond the knowledge and skills of the mother. On top of that this research findings show that adherence to the chosen infant feeding method is not only affected by the level of

knowledge of the mother but also by the availability and accessibility of cow milk. This problem is aggravated by the need to prepare it day and night and the inadequate coverage of cost for cow milk by NGOs.

Coping Strategy of the Informants

Despite the various challenges that HIV positive mothers face, most of the informants seem to practice safe infant feeding methods and they adhere to exclusive infant feeding method. The very basic essence of coping strategy is the mother's ambition to have HIV free child. Both EBF and ERF mothers use various strategies to cope with the pressures that come from other family members and adhere to the method of their chose.

Those informants who exclusively feed replacements have to constantly make sure that they are not seen by others while feeding the replacements, for doing that might be taken as an indication of their HIV status. Therefore, they usually pretend as if they are breast-feeding in the presence of other people.

Similarly, those EBF mothers copes the challenge they face from family members towards mixed feeding in different ways. Majority of them, especially those of the informants who have not disclosed their status, carry their children with them wherever they go in order to make sure that their children are not fed with other things in their absence. Those informants who have disclosed their status to at least one family member, however, get the support of the family member. Most of the time, in the absence of the mother, these family members look after the children and they make sure that nothing other than the breast milk is fed to the child.

Although most of the informants chose EBF due to economical reasons and despite the fact that they were uncomfortable to give their breast milk due to fear of HIV transmission, most of them adhered to it properly. This is likely due to the information and experience sharing that exists among the women, mainly through the women support group.

Perception of Informants towards PMTCT Service

As to PMTCT service, this study found that most of the informants felt that the health care providers, particularly the counselors, had good attitude towards HIV positive women and their capacity to provide proper counseling. This finding is in line with the studies in Jimma town on pregnant and lactating mothers and in Harar which showed that majority of the informant and half of the informants had good attitude towards VCT/ PMTCT the services respectively.

Hence, such good interaction between counselor and HIV positive mothers has an implication on their relationship. This is because the women can easily develop trust on the service, which also increases the health seeking behavior of pregnant mother in the community. Further, the success or failure of PMTCT service depends upon the attitude, skill, and experience of its employees.

However, there seems to be reservation among the women on the current education and information about exclusive infant feeding, which emphasizes on HIV positive women. Since the education mainly advocates exclusive infant feeding for HIV positive mothers, it is leading to a tendency, among the society, to associate exclusive feeding to HIV. This kind of association makes the women vulnerable to labeling and discrimination by others.

Although, the study informants perceived PMTCT service to be effective, they also had pointed out the need for collaboration among health care workers, family, and the community at large. As, PMTCT programs provide for both prevention of HIV transmission from mother to child & enrolment of infected pregnant women and their families into antiretroviral treatment (HAPCO; 2007).

The experience of informants reveals in this study was striking. Thus, stigma and discrimination was occurring for most of informants despite their infant feeding choice mainly due to cultural factors. The likelihood of both EBF and ERF practicing mothers

potentially seen as having HIV-positive status, there is lack of community support for both exclusive breastfeeding and replacement feeding options. From this, one can understand that beyond the individual, critically important considerations should include community resources and social norms.

The psychosocial, cultural, and economic factors were important factors that hamper informants to adhere to the chosen safer infant feeding methods.

On the other hand, this study showed that health institutions and individual factors are important factors that affect informants positively to cope the challenge they face and to adhere to what they plan to fed.

SOCIAL WORK IMPLICATION AND CONCLUSION

Social work Implication

Social work Education

Mother to child transmission of HIV accounts for more than 90% of pediatric AIDS and various studies indicate that the rate of MTCT of HIV is high among infants who have experienced mixed feeding. So that an understanding of the experiences of HIV positive women who choose exclusive infant feeding should be part of the training of social workers in order to encourage them to reduce HIV transmission through breast feeding.

It is important to educate social workers on how to train community-based organizations especially the women groups, in policy, advocacy, and right based approach, and in communication and mobilization in order to modify communities and social environmental conditions that reduce social inequities and to enhance social supports and mainstreaming HIV within populations. It is also imperative to educate social workers on how to handle serous emotional issues affecting PLAWA in general and HIV positive women particular.

Social work Practice

Social work practice is governed by social work principles and ethics led by social justice and human right. Social worker stands for the minority and the marginalized groups and peoples. Social workers in the health setting have an important role to play as part of multidisciplinary teams and contribute to the broad understanding of HIV positive women using holistic approach.

The wellbeing of society is strongly vital to exist and function in day-to-day life. Thus, alleviating clients' problems that hamper their psychosocial, cultural, and economic and developments have to be a primary emphasis. It needs to advocate and participate actively in the process of helping HIV positive women to become economically independent through education, training, and credit schemes in order to enhance women's decision making and to create favorable environment to implement exclusive infant feeding and to improve the quality of HIV positive women's lives. There is also a need to advocate the creation of a legal referral system for people affected by stigma and discrimination.

The result of this study can be used to guide exclusive infant feeding advocates and social workers who work with and on behalf of women with HIV positive and their families to prevent future problems in the practicing of safer infant feeding methods.

Social work Research

To understand the experience of HIV positive mothers and the challenges face in practicing exclusive infant feeding may not be fully explored in cross sectional study. Therefore, that longitudinal study in different settings (hospitals and health centers) is important to examine factors that determine HIV positive mothers to adhere to recommended infant feeding method.

Therefore, the researcher forwards the following specific recommendations for Tikur Anbessa Hospital:

1. Increased efforts that support HIV positive mothers like mother support group, educate, encourage all mothers despite their HIV status to their use of exclusive breast-feeding in PMTCT services, and in the community and continue promoting and increasing the rate of exclusive breast-feeding in this setting.
2. Most of the mothers were found to be in a very low economic status and it is usually difficult for them to feed themselves and able to breastfed well their infants. HIV/AIDS PNC mothers who have opted exclusive breast-feeding have to be supported with some supplementary foods by hospitals or other concerned bodies, for these synergy have to be made along with different organizations.
3. Improving the life skills of mother is another important area of intervention that should be emphasized. This is because HIV/AIDS persons, especially mothers face multi dimensional problems in their day to day life and these in turn have an impact in the infant feeding practice. Hence, one of the feasible interventions to overcome this problem is to build the life skill of mothers emphasizing on developing their assertiveness, communication, persuasion, negotiating skills, and overcoming the challenges.
4. PMTCT counselors should strengthen their non-judgmental attitudes to ensure good relationships with HIV positive mothers and they need to include life skill training to enable HIV positive mothers' uphold negotiation skills to overcome their challenges.

CONCLUSION

So far, this study has aimed at revealing deeply embedded attitudes, practices, knowledge, and beliefs regarding exclusive infant feeding in general and post natal HIV mothers in particular. It also tries to enunciate the major hindering factors towards exclusive

breast-feeding experience, especially pin pointing problems with failure to adhere. Moreover, the attitude and perceptions of HIV/AIDS mothers towards PMTCT services is also described in the previous chapters. Hence, the research has identified a number of important finding that can actually add to the existing body of knowledge and has identified future course of actions on PMTCT.

1. The majorities of the informants in this study have rich information about safe infant feeding and make frequent contacts with PMTCT services. The EBF user have awareness on the danger of mixed feeding and breast disease and give breast care and seek medical care when they get sick. Similarly, ERF users know how to prepare formula /cow milk although some of them do not adhere due to the reason beyond them. All the informants fed their children on demand.

2. Infant feeding is rooted in the socioeconomic, cultural and PMTCT context that upholds the decision-making and practice of EIF. Almost all of the informants prefer ERF to avoid postnatal MTCT of HIV however, majority of the informants choose EBF due to economic reason. Since most of the mothers live a in low economic status, it bears difficulty to afford buying formula /cow milk. Some of the ERF chooser informants prefer this method to ascertain guarantees to prevent HIV transmission through breast-feeding and the resultant effect of breast disease. Most of the informants who chooses Exclusive Breast Feeding adheres more than Exclusive replacement Feeding choosers and this makes it Exclusive Breast Feeding (EBF) feasible in the study area.

3. This study reveals that exclusive breast-feeding may be feasible, affordable, safe, and sustainable as an infant feeding alternative in helping to prevent vertical HIV transmission in Ethiopia. However, much effort should be done to maximize its acceptability.

4. Despite the much effort done by the informants to adhere to the type of infant feeding chosen by the mothers many bottlenecks affect them to adhering have prevailed. The major

reasons for occurrence, are fear of disclosure, stigma and discrimination, economic situation, and accessibility to cow milk if they have chosen for exclusive replacement –feeding are among others. Insufficient breast milk, disease of the breast and customary infant feeding (prolonged breast-feeding, giving water to the infant and early initiation of complementary food) are reason for breast-fed mothers.

5. HIV positive mothers face challenges while they are practicing safe infant feeding methods and yet, most of the study informants, adhere to exclusive infant feeding method .Women's belief that exclusive infant feeding helps them in having HIV- free child plays an important role in their coping strategies. Besides that, this study reveals that HIV-infected women possessing better coping skills with problems they encounter faces in the personal and social interaction were married, and had disclosed to their partners, planned birth, and had previous HIV free children.

6. Concerning PMTCT service, most of the informants have appreciated the service and have confirmed their way of treatment is very good. In their response, they accentuated the positive attitude the counselors have towards HIV positive women. The counselors help them in educating them how to exclusively breastfeed or formula/cow milk fed and HIV positive mothers share their experience and learn each other. Hence, it entails HIV positive clients develop trustworthiness to the service and increase the health seeking behavior of pregnant mother within the community.

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ANNEX ONE

General Information of the Study Informants

My name is Aster Berhe I am a Masters of social work student at Addis Ababa University Graduate School of Social Work. I am here to study the infant feeding practice among HIV positive mothers in relation to Mother to child transmission of HIV. Approvals of ethical clearance were taken from Ethical Clearance Committee of the Graduate School of Social Work, Addis Ababa University and from Ethical Clearance Committee of Tikur Ambassa hospital, Obstetrics, and gynecology department. This research is a purely academic purpose. I use the information for the fulfillment of the thesis requirement and it may be used as a base line data for intervention. I am going to ask you questions to be responded by you. Some of the questions are very personal that some people may find them difficult to answer, but you are not obliged to respond questions you are not interested in. In addition, with your permission, I will audio- record to be transcribed afterwards to be used only by the researcher. Your answers are completely confidential, your name and house number are neither to be recorded. Participation is voluntary and that you can withdraw any time without any precondition. However, your honest answer to the questions will have great benefit for the researcher for a better understanding of the existing feeding practices. The interview will take 45 min- 1hr.

I greatly appreciate your collaboration in responding to these questions. Are you willing to discuss with me?

Signature of the interviewer……

Signature of the informants……..

ANNEX TWO

Interview Guides

INFORMANT - HIV positive mothers who exclusively breastfed their infants

INTRODUCTION:

Good morning! I am Aster Berhe I have come from Addis Ababa University. I am here today to interview the women who are here about infant feeding practice in order to generate information and promote appropriate infant feeding practice. To attain this purpose, your honest and genuine participation in responding to the questions prepared is very important & highly appreciated.

CONFIDENTIALITY AND CONSENT

Would like you to answer some personal questions that some people may find it difficult to answer. Your answers are completely confidential. Your name will not be registered on this form. You do not have to answer any question if you do not want to and you can stop the interviewer at any time. However, your honest answer to these questions will help us better understand the experience of mothers related to VCT and infant feeding practices. We would greatly appreciate your help in responding to this study. The interview will take about 45 – 1 hour. Would you be willing to participate?

If yes, proceed

If no, thank and stop here.

_____

Signature of interviewer

_____

Signature of interviewee

SECTION I. IDENTIFICATION DATA

Name of health Institution: _____

Interviewed No_____

Date of interview: _____

Time of Interview…… Start……..Finish

SECTION II. SOCIOECONOMIC AND CULTURAL CONDITION

1. Education of woman (years of schooling)_____
2. Woman's age (years) _____
3. Occupation (full time housewife, trader, professional, other- specify)_____
4. Marital status: single married
5. Religion: Islam Christian Other (specify) _____
6. Ethnic group: _____
7. Income source_____
8. How many children do you have_____?
9. Who is decided on infant feeding?_____
10. How customary it is to feed an infant in your area?
    - Breastfeeding, pre-lacteal feeds, exclusive breastfeeding
    - How is the trend concerning mixed feeding
    - Formula feeding
11. Are there any strong cultural practices that affect different feeding practices?
12. What did you learn about MTCT from the PMTCT services at the hospital?
    - Did the counselor tell you about infant feeding option? If yes what is/was your choice and why?
    - How is the attitude of health workers towards you?

- What more information would you have liked in your consultation with PMTCT service?
- What is your suggestion regarding PMTCT service?

13. What do you know about mother to child transmission of HIV?

- Have you breastfeed your child? Yes /No If yes, how old is this baby (months) ___
- What have you been told (heard, counseled) about exclusive breastfeeding? Probe
- Who ,where, when told you about exclusive breastfeeding
- Did you take prophylaxis (Have you been told the chance of HIV transmission during breastfeeding (even after taking NVP prophylaxis)
- How did you feel about exclusive breast- feeding option, when you first decided for it? How are you feeling about the decision now?
- How were you able to implement exclusive breast -feeding? Tell me the story of your experience so far.
- How often would you feed breast to your child?
- What did you do if your nipple is cracked?

14. When the child is born, what is the first thing giving to him or her to eat or drink?

- Do you think feeding breast milk only is an adequate nutrition to your baby? If yes/no how?

15. Did you take antiretroviral therapy? If yes, do you think this affects the quality of breast milk?

- Have you given the expressed breast milk to the infant? If no, How do you feed your child when you go out of your home?(at work place, School…)
- Have you ever been sick? If yes, have you changed the way you fed your child during that time? (Yes) (No) What did you do?
- Did your family support your choice of feeding?

- What do you think is the reaction of the family and community to mothers who exclusively breast feed?
- Most women do not want to disclose their HIV status. What do you think is the reason?
- Did/do you have any peer group support with mothers in the same condition you are in?
- In what way could the health worker, family, and community support you better?
- What kind of support do you think such women need from health workers, family members and the community to practice the recommended infant feeding?
- What do you think about the factors that affect adherence of mothers to the feeding options they planed or decided to use in A.A? (Enabling factors, hindering factors)

17. What challenges did you face?
18. How do you address the mentioned challenges?

Other

Do you have any other concerns about HIV and infant feeding?

Thank You for Your Time!

ANNEX THREE

INFORMANT- HIV positive replacement feeding mothers

INTRODUCTION:

Good morning! I am Aster Berhe I have come from Addis Ababa University. I am here today to interview the women who are here about infant feeding practice in order to generate information and promote appropriate infant feeding practice. To attain this purpose, your honest and genuine participation in responding to the questions prepared is very important & highly appreciated.

CONFIDENTIALITY AND CONSENT

Would like you to answer some personal questions that some people may find it difficult to answer. Your answers are completely confidential. Your name will not be registered on this form. You do not have to answer any question if you do not want to and you can stop the interviewer at any time. However, your honest answer to these questions will help us better understand the experience of mothers related to VCT and infant feeding practices. We would greatly appreciate your help in responding to this study. The interview will take about 45 – 1 hour. Would you be willing to participate?

If yes, proceed

If no, thank and stop here.

_____

Signature of interviewer

_____

Signature of interviewee

SECTION I. IDENTIFICATION DATA

Name of health Institution: _____

Interviewed No_____

Date of interview: _____

Time of Interview… Start…...Finish

II. SOCIOECONOMIC AND CULTURAL CONDITION

1. Education of woman (years of schooling)_____

2. Woman's age (years) _____

3. Occupation (full time housewife, trader, professional, other- specify)_____

4. Marital status: single married

5. Religion: Islam Christian Other (specify) _____

6. Ethnic group: _____

7. Income source_____

8. How many children do you have_____?

9. Who is decided on infant feeding?_____

10. How is it customary to feed an infant in your area?

- Breastfeeding, pre-lacteal feeds, exclusive breastfeeding
- How is the trend concerning mixed feeding
- Formula feeding

11. Are there any strong cultural practices that affect different feeding practices?

- What did you learn about MTCT from the PMTCT services at the hospital?
- Did the counselor tell you about infant feeding option? If yes what is/was your choice and why?
- How is the attitude of health workers towards you?
- What more information would you have liked in your consultation with PMTCT service?
- What is your suggestion regarding PMTCT service?

12. What do you know about mother to child transmission of HIV?

- What do you understand about exclusive infant feeding?

13. Are you currently practicing replacement feeding? Yes /No If yes, how old is this baby (months) ___

- How was the decision made to replacement feed your baby? Why not breastfeeding? (health professionals role, family support, any supporting organizations, the issue of disclosure)
- When the child is born, what is the first thing to be given to him or her to eat or drink?
- What would you say if somebody asks you to give breast milk immediately after birth?
- Did you know a child born to HIV infected mother could still be infected despite not breastfeeding? (If yes, who told you
- With what did you start feeding your baby? (formula, cow's milk)

A. Infant Feeding Formula

- How did you feel about this feeding option, when you first decided for it? How are you feeling about the decision now?
- How were you able to implement infant formula feeding? Tell me the story of your experience so far (How often would you buy it?, Who would help you to pay for it?, If you could not afford it, what would you do?)
- Do you think it is possible to mix the formula correctly? (Probe about when it would be difficult to prepare it correctly, dilution.)
- What is your opinion about breastfeeding by an HIV positive mother?
- Do you feel that you and your baby have missed something because you haven't breastfed your infant?
- Were you in any situation that forced you to breastfeed your child in between?
- Did your baby get any sick episodes because of the replacement feeding that

you are giving him?

- If you were to make this decision again, would you choose the same feeding option for your baby, why
- What challenges did you face?
- What are you doing to address the mentioned challenges?

B. Modified Cow's Milk

- How did you feel about this feeding option, when you first decided for it? How are you feeling about the decision now?
- How were you able to implement modified cows feeding? Tell me the story of your experience so far
- If you were to make this decision again, would you choose the same feeding option for your baby, why?
- What is your opinion about breastfeeding by an HIV positive mother?
- what do you think the experience will look like
- Do you feel that you and your baby have missed something because you haven't breastfed your infant?
- Were you in any situation that forced you to breastfeed your child in between?
- Did your baby get any sick episodes because of the replacement feeding that you are giving him?
- How was/is the experience of not breastfeeding (Based on what is expected from the society and family members, how did you manage other questions?, how was the cost and the materials, time)
- What do you think is the reaction of the family and community to mothers who exclusively formula/cow milk feed?

- Most women do not want to disclose their HIV status. What do you think is the reason?
- Did/do you have any peer group support with mothers in the same condition that you are in?
- How are women who do not breastfeed treated in your community
- What kind of support do you think such women will need from health workers, family members and the community to practice the recommended infant feeding?

ACCEPTABLITY, FEASIBLITY, AFFORDABLITY, SAFE, and SUSTAINABLITY (AFASS) FACTORS

1. How do you prepare the formula/cow milk?
2. When do you prepare the formula/cow milk? Probe (during day/night time)
3. How do you feed your baby?(Using cup/ bottle)
4. Do you think it is possible to prepare and feed a baby that is not breastfeeding infant formula 5–6 times/day? If no, Why/Why not? (Probe about time, resources, infant needs, etc.)
5. How confident are you that you have access to enough fuel to enable you to cook water/milk in order to feed your child?
6. How do you store the formula/cow milk?
7. Did your family support your choice of feeding?
8. What do you think about the factors that affects adherence of mothers to the feeding options they planed or decided to use in A.A?

Other

Do you have anything that you want to say which I did not ask?

Thank You for Your Time!

Annex 4

የጥናቱ ተሣታፊ አጠቃላይ መረጃ

ስሜ ሲ/ር አስቴር በርሄ እባላለሁ፡፡ በአዲስ አበባ ዩኒቨርሲቲ የሶሻል ወርክ ድህረምረቃ ትምህርት ክፍል ተማሪ ስሆን በማካሄደው ጥናት ላይ ተሣታፊ እንዲሆኑ ተመርጠዋል፡፡

የጥናቱ ዓላማ ኤች.አይ.ቪ ቫይረስ በደማቸው ውስጥ የለባቸው እናቶች ልጆቻቸውን የሚመግቡበት የአመጋገብ ዘዴ እና ልምድ እንዲሁም የሚያጋጥማቸውን ችግሮች ለመገምገም ነው፡፡ የዚህ ጥናት ውጤትም ባለው የህፃናት አመጋገብ ፓሊሲ ላይ አዲስ እቅድና ለውጥ ያመጣል ብለን እንገምታለን፡፡

ለዚህም ጥናት መሳካት የእርስዎ በጐ ፈቃደኝነትና ተሳትፎ ያስፈልጋል፡፡ ለሚያሣዩት በጐ ፈቃደኝነትና ተሳትፎ በቅድሚያ አመሰግናለሁ፡፡

ይህ ቃለመጠይቅ በእርሶ ፍቃደኝነት በመቅረፀ ድምፅ ይቀረጻል፡፡ ካሴቱም ሆነ የፅሁፉ መረጃው ከጥናት አድራጊውና ከአማካሪው ውጭ ለሌላ ማንኛውም አካል ተላልፎ አይሰጥም፣ የሚሠጡን ማንኛውም መረጃ በሚስጢር ይጠበቃል፣መረጃውም ለዚህ ጥናት ብቻ ይውላል፡፡ በዚህ ጥናት ስምምነት በመጠየቁ ወረቀት ስምዎትም ሆነ ቤትዎት ላይ እንዳማይጠቀስ እናረጋግጥልዎታለን፡፡ በጥናቱ ያለመሳተፍና በማንኛውም ጊዜ ጥናቱን አቋርጠው መተው ይችላሉ፡፡

በዚህ ጥናት በመሳተፍዎ በእርሶም ሆነ በልጅዎ የሕክምና ክትትል ሂደት ላይ የሚያሣድረው ተፅዕኖ የለም፡፡ እንደውም በዚህ ጥናት በቂና ጠቃሚ መረጃ በመስጠት በመሳተፎዎ ቫይረሱ በደማቸው ያለባቸው እናቶች በሚያጎጥማቸው የአመጋገብ ዘዴ ችግሮች የመፍትሔ እቅድ ለማዘጋጀትና በድህረ ወለድ ወቅት የኤች.አይ. ቪ ቫይረስ ከእናት ወደ ልጅ የመተላለፍ እድል ለመቀነስ ከፍተኛ አስተዋፅኦ አለው፡፡ ቃለመጠየቁ የሚፈጀው/የሚወስደው/ጊዜ ከአርባ አምስት ደቂቃ እስከ አንድ ሰዓት ይሆናል፡፡ ፍቃደኛ ካልሆኑ በጥናት ላይ እንዲሣተፉ አይገደዱም፡፡

ከጥናቱ ለመሳተፍ ፍቃደኛ ነዎት?

ፍቃደኛ ካልሆኑ አመሰግናለሁ፡፡

ፍቃደኛ ከሆኑ ከዚህ በታች ይፈርሙ አመሰግናለሁ

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የተሣታፊ ፊርማ

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የቃለ መጠየቅ አድራጊው ፊርማ

Annex 5

በግል የሚደረግ ጠለቅ ያለ ቃለ መጠይቅ

የእናት ጡት ወተት ብቻ ለሚያጠቡ እናቶች የተዘጋጀ ቃለ መጠይቅ

መግቢያ

ጤና ይስጥልኝ ስሜ ሲ/ር አስቴር በርሄ ሲሆን ከአዲስ አበበ ዩኒቨርስቲ ነው የመጣሁት የጥናቴ አለማ ኤች.አይ. ቪ ቫይረስ በደማቸው ያለባቸውን እናቶች ልጆቻቸውን የሚመግቡበት የአመጋገብ ዘዴ እና ልምድ እንዲሁም የሚያገጥማቸው ችግሮች ለመገምገም ሲሆን የጥናቱ ውጤትም ካለው የህፃናት አመጋገብ ፓሊሲ ላይ የማሻሻያ ሀሣቦች ወይም አዲስ እቅድና ለውጥ ያመጣል ብዬ አምናለሁ፡፡ እርስዎንም የምጠይቀዎት በዚህ ዙሪያ በቂ እውቀት እና ልምድ አለዎት ብዬ ስላመንኩ ነው፡፡ በቃለ መጠይቅ ውስጥ አንዳንድ ነጥቦች ምናልባትም የግል ህይወቶዎን የሚመለከቱ ሊሆኑ ይችላሉ፡፡ ቃለመጠየቁን ለማጠናቀቅ ከ 45 ደቂቃ እስከ 1 ሰዓት ሊወስድ ይችላል፡፡ የሚሰጡት መረጃ ስሞትን ወይም ማንነትዎን ከሚገልፅ ነገር ጋር ስለማይያያዝ ማንም ስለመሳተፍዎ የሚያውቅ አይኖርም፡፡

በጥናቱ መሣተፍም ሆነ አለመሳተፍ ይችላሉ አልሳተፍም ለማለትም የሚደረግብዎት ነገር የለም፡፡ ቃለመጠየቅ ለማድረግ ፍቃደኛ ቢሆኑ እንኳን ለማይፈልጉት ጥያቄ መልስ አለመስጠት እና ቃለመጠየቁን ከፈለጉበት ጊዜ ማቆም ይችላሉ፡፡ ነገር ግን ለሚመልሷቸው ጥያቄዎች ትክክለኛውን መልስ እንዲሰጡ እጠይቃለሁ በጥናቱ ለመሣተፍ ይስማማሉ፡፡
አልስማማም ከሆነ መልሱ አመሰግናለሁ እዚህ ጋር ያብቁ፡፡
አዎ ከሆነ መልሱ የሚከተለውን ይሙሉ፡፡

ተጠያቂው ፊርማ

የጠያቂው ፊርማ

ክፍል አንድ

የጤና ተቋሙ ስም

የቃለ መጠየቁ ቁጥር

ቃለ መጠየቁ የተከናወነበት ዕለት

ቃለ መጠየቁ የተከናወነበት ሰዓት ---------- የጀመረበት----------ያለቀበት

- የትምህርት ደረጃዎ ስንት ነው?
- እድሜዎ ስንት ነው?
- በአሁኑ ጊዜ ስራዎ ምንድን ነው?
- የጋብቻ ሁኔታ ቢገልፅልኝ?
- ሐይማኖትዎ ምንድን ነው?
- ብሔርዎን ምንድን ነው?
- የቤተሰብ የወር ገቢ ምን ያህል ነው? /የገቢ ምንጭዎት ምንድን ነው?/
- ስንት ልጆች አሎዎት?
- ልጅዎን እንዴትና ምን መመገብ እንዳለባት የሚወስነው ማነው?
- በአካባቢዎ ምን ምን አይነት የህፃን አመጋገብ ያውቃለ?
    - የጡት ወተት፣ ከጡት ወተት በፊት የሚሰጡት?
    - የእናት ጡት ወተት ብቻ::
    - የእናት ጡት ወተትና ሌላ ተጨማሪ ?
    - የቆርቆሮ ወተት ወይም የላም ወተት?
- ከህፃናት አመጋገብ በተያያዘ የባህል ተፅዕና አለ ካለ? ቢገልፁልኝ?

- ኤች አይ ቪ ከእናት ወደልጅ እንዴት እንደሚተላለፍ ኤች አይ ቪ ከእናት ወደ ልጅ እንዳይተላለፍ ከሚረዳው አገልግሎት ምን የተማሩት ያወቁት ነገር አለ?
    - ዝርዝር አድርገው ቢገልፁልኝ?
- የምክር አገልግሎት የሚሰጡ ባለሙያዎች ስለልጅ አመጋገብ የጡት ወተትን ጨምሮ የምክር አገልግሎት ስጥተዎታል አዎን ካሉ ምን መረጡ? ለምን ?
- የጤና ባለሙያዎች ለእርሶዎ ያላቸው አመለካከት ምን ይመስላል?
- ምን መረጃ ባገኝ ይበልጥ እጠቀም ነበር ብለው ያስባሉ?
- ስለ አገልግሎቱ ያለዎትን አስተያየት ቢገልፁልኝ

- ከእናት ወደ ልጅ ኤች አይ ቪ ቫይረስ እንዴት እንደሚተላለፍ ሊገልፁልኝ ይችላሉ?

- ልጅዎን ጡት አጥብተው ያውቃሉ? አዎ/ አይ አዎ ካሉ ልጅዎ እድሜው ምን ያህል ነው?
- ስለእናት ጡት ወተት ብቻ ጠቃሚነት ሰምተው ወይም ተምረው ያቃሉ?
    - ማን፣ የት፣ መቼ ተነገርዎት::
    - ከእናት ወደ ልጅ እንዳይተላለፍ የሚረዳ መድሐኒት ተጠቅመው ቢሆን ጡት በማጥባት ጊዜ ኤች አይ ቪ ቫይረስ ከእናት ወደ ልጅ የመተላለፍ እድል እንዳለው ያውቃሉ?
- የእናት ጡት ወተትን ብቻ መመገብ ብለው መጀመሪያ ሲወስኑ ምን ተሰማዎት? አሁንስ?
- እንዴት የእናት ጡት ወተት ብቻ ልጅዎን እየመገቡ እንዳሳደጉ ዘርዘር አድርገው ይግለፁልኝ?
- በቀን ስንት ጊዜ ጡት ወተት ይመግቡ ነበር?
- የጡትዎ ጫፍ ቢቆስልቦዎት ምን ያደርጋሉ?
- ልጅዎ እንደተወለደ ምን የሚበላ ወይም የሚጠጣው ነገር ሰጡት?
- የእናት ጡት ወተት ብቻ ለልጅዎ መስጠት በቂ ምግብ ያገኛል ብለው ያስባሉ አዎ/አይ እንዴት?
- ፀረ ኤች አይ ቪ ቫይረስ ተጠቃሚ ነዎት? አዎካሉ መዳኒቱ የጡት ወተት መጠን ይቀንሳል ብለው ያስባሉ?
- ጡታን አልበው ልጅዎን መግበው ያውቃሉ? አይ ካሉ ለስራ? ለትምህርት? ለሌላ ጉዳይ? ከቤት ውጭ ሲሆን ልጅዎን ምን ይመግቡታል?
- ታመው ያውቃሉ? አዎ ካሉ በህመምዎ ምክንያት የልጅዎን የአመጋገብ ሁኔታ ቀይረዎል? አዎ/አይ ካሉ እንዲት አደረጉ?
- ቤተሰቦዎ እርሶዎ የመረጡትን የህፃን አመጋገብ ዘዴ ይደግፋሉ?
- ልጅዎን የእናት ጡት ወተት ብቻ መመገብዎ የአጋጠምዎትን ችግር በዝርዝር ቢገልፁልኝ?
- ያጋጠምዎትን ችግር እንዴት ተቋቋሙት?

- አንዲት የጡት ወተት ብቻ የመረጠች እናት ቤተሰቡና ማህበረሰቡ ምን አይነት አመለካከት አለው?

- አብዛኛዉ እናቶች ኤች አይ ቪ ቫይረስ በደማቸው ውስጥ እንዳለባቸው መንገር አይፈልጉም ምክንያቱ ምን ይመስለዎታል?
- እንደ እርስዎ ኤች አይ ቪ ቫይረስ በደማቸው ውስጥ ያለባቸው እናቶች ጋር በጋራ የምትወያዩበት ግሩኘ ውስጥ አባል ነዎት?
- የጤና ባለሙያው ቤተሰብና ማህበረሰብ እንዴት አድርጐ የእናት ጡት ወተት ብቻ መመገብ የፈለገችን እናት መርዳት ይችላል ይላሉ ዘርዘር አድርገው ይግለፁልኝ?
    - አንዴት ጡት ማጥባት ብቻ የወሰነች እናት በውሳኔዎ ፀንታ ልጅዋን እንድትመግብ የሚያግዛት ወይም ሊያሰናክሏት የሚችሉ ምክንያቶችን ብገልፁልን? ሌላ?
    - ስለ ኤች አይ ቪ ቫይረስ እና ህፃናት አመጋገብ መግለጽ የሚፈልጉት ካለ?

አመሰግናለሁ!

Annex 6

በግል የሚደረግ ጠለቅ ያለ ቃለ መጠይቅ ተጠያቂ
በዱቄት ወተት ወይም በላም ወተት ለሚመግቡ እናቶች የተዘጋጀ ቃለ መጠያቅ

መግቢያ

ጤና ይስጥልኝ ስሜ ሲ/ር አስቴር በርሄ ሲሆን ከአዲስ አበባ ዩኒቨርስቲ ነው የመጣሁት የጥናቴ አላማ ኤች አይ ቪ ቫይረስ በደማቸው ያለባቸውን እናቶች ልጆቻቸውን የሚመግቡበት የአመጋገብ ዘዴ እና ልምድ እንዲሁም የሚያገጥማቸው ችግሮች ለመገምገም ሲሆን የጥናቱ ውጤትም ካለው የህፃናት አመጋገብ ፓሊሲ ላይ የማሻሻያ ሀሣቦች ወይም አዲስ እቅድና ለውጥ ያመጣል ብዬ አምናለሁ፡፡ እርስዎንም የምጠይቀዎት በዚህ ዙሪያ በቂ እውቀት እና ልምድ አለዎት ብዬ ስላመንኩ ነው፡፡ በቃለ መጠይቅ ውስጥ አንዳንድ ነጥቦች ምናልባትም የግል ህይወቶዎን የሚመለከቱ ሊሆኑ ይችላሉ፡፡ ቃለመጠየቁን ለማጠናቀቅ ከ 45 ደቂቃ እስከ 1 ሰዓት ሊወስድ ይችላል፡፡ የሚሰጡት መረጃ ስሞትን ወይም ማንነትዎን ከሚገልፅ ነገር ጋር ስለማይያያዝ ማንም ስለመሳተፍዎ የሚያውቅ አይኖርም፡፡

በጥናቱ መሣተፍም ሆነ አለመሳተፍ ይችላሉ አልሳተፍም በማለትዎ የሚደርስብዎት ነገር የለም፡፡ ቃለመጠየቅ ለማድረግ ፍቃደኛ ቢሆኑ እንኳን ለማይፈልጉት ጥያቄ መልስ አለመስጠት እና ቃለመጠየቁን በፈለጉበት ጊዜ ማቆም ይችላሉ፡፡ ነገር ግን ለሚመልሷቸው ጥያቄዎች ትክክለኛውን መልስ እንዲሰጡ እጠይቃለሁ በጥናቱ ለመሣተፍ ይስማማሉ፡፡
አልስማማም ከሆነ መልሱ አመሰግናለሁ እዚህ ጋር ያብቁ፡፡
አዎ ከሆነ መልሱ የሚከተለውን ይሙሉ፡፡

ተጠያቂው ፊርማ

የጠያቂው ፊርማ

ክፍል አንድ

የጤና ተቋሙ ስም

የቃለ መጠየቁ ቁጥር

ቃለ መጠየቁ የተከናወነበት ዕለት

ቃለ መጠየቁ የተከናወነበት ሰዓት ---------- የጀመረበት----------ያለቀበት

- የትምህርት ደረጃዎ ስንት ነው?
- እድሜዎ ስንት ነው?
- በአሁኑ ጊዜ ስራዎ ምንድን ነው?
- የጋብቻ ሁኔታ ቢገልፅልኝ?
- ሐይማኖትዎ ምንድን ነው?
- ብሔርዎን ምንድን ነው?
- የቤተሰብ የወር ገቢ ምን ያህል ነው? /የገቢ ምንጭዎት ምንድን ነው?/
- ስንት ልጆች አሎዎት?
- ልጅዎን እንዴትና ምን መመገብ እንዳለባት የሚወስነው ማነው?
- በአካባቢዎ ምን ምን አይነት የህፃን አመጋገብ ያውቃሉ?
  - የጡት ወተት፣ ከጡት ወተት በፊት የሚሰጡት የእናት ጡት ወተት ብቻ።
  - የእናት ጡት ወተትና ሌላ ተጨማሪ የቆርቆሮ ወተት።
- ከህፃናት አመጋገብ በተያያዘ የባህል ተጽእኖ አለ? ካለ ቢገልፁልኝ?

- ኤች አይ ቪ ከእናት ወደልጅ እንዴት እንደሚተላለፍ ኤች አይ ቪ ከእናት ወደ ልጅ እንዳይተላለፍ ከሚረዳው አገልግሎት ምን የተማሩትእና ያወቁት ነገር አለ?
  - ዝርዝር አድርገው ቢገልፁልኝ?
- የምክር አገልግሎት የሚሰጡ ባለሙያዎች ስለልጅ አመጋገብ የጡት ወተትን ጨምሮ የምክር አገልግሎት ስጥተዎታል? አዎን ካሉ ምን መረጡ? ለምን ?
- የጤና ባለሙያዎች ለእርሶዎ ያላቸው አመለካከት ምን ይመስላል?
- ምን መረጃ ባገኝ ይበልጥ እጠቀም ነበር ብለው ያስባሉ?
- ስለ አገልግሎቱ ያለዎትን አስተያየት ቢገልፁልኝ?
- ከእናት ወደ ልጅ ኤች አይ ቪ ቫይረስ እንዴት እንደሚተላለፍ ሊገልፁልኝ ይችላሉ?
- ስለህፃናት አመጋገብ ዘዴ የሚያውቁትን ቢነግሩኝ?
- ልጅዎን የቆርቆሮ ወይም የላም ወተት መግበው ያውቃሉ? አዎ/ አይ አዎ ካሉ የልጅዎ እድሜ ስንት ነው? ቢገልፁልኝ?

- እንዴት ልጅዎን የቆርቆሮ ወይም የላም ወተት ለመመገብ ወሰኑ? ለም ጡት አላጠቡም/ የሚከተሉትን ነጥቦች በማንሳት ይበልጥ እንዴብራራ አድርግ
    - የጤና ባለሙያዎች
    - የቤተሰብ እገዛ
    - የእርዳታ ድርጅት እገዛ
    - ኤች አይ ቪ ቫይረስ በደማቸው ውስጥ እንዳለ ለሌላሰው ስለመንገር
- ልጅዎ እንደተወለደ ምን የሚበላ ወይም የሚጠጣው ነገር ሰጡት?
- ልጅዎን እንደወለዱ ወዲያው የጡት ወተት እንዲያጠቡ ሰዎች ቢጠይቅዎት ምን ይላሉ?
- የጡትዎትን ወተት ባያጠቡ እንኳን ልጅዎ በቫይረሱ ሊጠቃ እንደሚችል ያውቃሉ? አዎ ካሉ ማን ነገሮዎት/ ከየት ሰሙት?
- ልጅዎን ምንድን ነው የሚመግቡት?
    - የቆርቆሮ ወተት
    - የላም ወተት

ሀ የቆርቆሮ ወተት ለሚመግቡ

- ልጅዎን በቆርቆሮ ወተት ለማሳደግ መጀመሪያ ሲወስኑ ምን ተሰማዎት? አሁንስ?
- ልጅዎን የቆርቆሮ ወተት ብቻ እንዴት እንደመገቡ በዝርዝር ልምድዎን ቢገልፁልኝ?
    - ለስንት ጊዜ አንድ የቆርቆሮ ወተት ይገዛሉ?
    - የቆርቆሮ ወተቱን ማነው የሚጋዛልዎት? እርሶ? ድርጅቱ?
    - የመግዛት አቅም ሲያንስ ስዎች ምን ያደርጋሉ?
    - የቆርቆሮ ወተት አዘጋጃጀት ቀላል ነው ይላሉ?
- ኤች አይ ቪ ቫይረስ በደምዋ ያለባት አናት ጡት ስታጠባ ቢያዩ ምን ይላሉ?
- ጡት ባለማጥባትዎ እርሶዎ ወይም ልጅዎ የቀረብን ነገር አለ ብለው አስበው ያውቃሉ?
- ጡት እንዲያጠቡ ያስገደዶዋት ሁኔታ አጎጥሞዎት ያውቃል? አዎ ካሉ እንዴት አደረጉ?
- ልጅዎትን በሚሰጡት የአመጋገብ ዘዴ የተነሳ አሞት ያውቃል?
- በድጋሚ ልጆዎን እንዴት እንደሚመግቡ ወሰኑ? /ምረጡ/ ቢባሉ አሁን የሚከተሉትን የአመጋገብ ዘዴ ይመርጣሉ? ለምን ?
- ልጅዎን የቆርቆሮ /ዱቄት/ ወተት ብቻ በመመገብዎ ያጋጠሞዎትን ችግር በዝርዝር ቢገልፁልኝ?
- ያጋጠሞዎን ችግር እንዴት ተቋቋሙት?

የላም ወተት አመጋገብ ዘዴ

- ይህን አመጋገብ ዘዴ መጀመሪያ ሲወስኑ ምን ተሰማዎት? አሁንስ በውሳኔዎት ምን ይሰማዎታል?
- የላም ወተት አመጋገብ ዘዴን እንዴት ሊተገብሩ ቻሉ? ከወለዱ ጊዜ ጀምሮ እስከ አሁን ያሎትን ልምድ በዝርዝር ይግለፁልኝ?
- ልጅዎን የቆርቆሮ /ዱቄት/ ወተት ብቻ በመመገብዎ ያጋጠሞዎትን ችግር በዝርዝር ቢገልፁልኝ?
- ያጋጠሞዎትን ችግር እንዴት ተቋቋሙት?
- በድጋሚ ልጆዎን እንዴት እንደሚመግቡ ወሰኑ? /ምረጡ/ ቢባሉ አሁን የሚከተሉትን የአመጋገብ ዘዴ ይመርጣሉ? ለምን ?
- ኤች አይ ቪ ቫይረስ በደምዎ ያለባት እናት ጡት ስታጠባ ቢያዩ ምን ይላሉ?
- ጡት ባለማጥባትዎ እርሶዎ ወይም ልጅዎ የቀረብን ነገር አለ ብለው አስበው ያውቃሉ?
- ጡት እንዲያጠቡ ያስገደዶዎት ሁኔታ አጋጥሞዎት ያውቃል? አዎ ካሉ እንዴት አደረጉ?
- ልጅዎት በሚስጡት የአመጋገብ ዘዴ የተነሳ አሞት ያውቃል ወይ?

- ጡት አለማጥባት ምን ይመስላል?
  - የቤተሰብ አባላትና ህብረተሰቡ ከሚጠብቁት አንፃር
  - የሌሎች ሰዎች ጥያቄዎችን እንዴት ተቋቋሙት?
  - ክፍያውን እንዴት ቻሉት?
- ቤተሰቡና የአካባቢ ህብረተሰብ የቆርቆሮ ወተት፣ /የዱቄት ወተት/ የላም ወተት አመጋገብ ዘዴዎችን እንዴት ተቀበሉት?
- አብዛኛው እናቶች ኤች አይ ቪ ቫይረስ በደማቸው ውስጥ እንዳለባቸው መንገር አይፈልጉም ምክንያቱ ምን ይመስልዎታል?
- እንደ እርስዎ ኤች አይ ቪ ቫይረስ በደማቸው ውስጥ ያለባቸው እናቶች ጋር በጋራ የምትወያዩበት ግሩፕ ውስጥ አባል ነዎት?
- የጤና ባለሙያው ቤተሰብ ማህበረሰብ እንዴት አድርጓ የቆርቆሮ /ዱቄት/ ወተት ወይም የላም ወተት ብቻ መመገብ የፈለገችን እናት መርዳት ይችላል ይላሉ? ዘርዘር አድርገው ይግለፁልኝ?
- ጡት ማጥባት ብቻ የወሰነች አንዲት እናት በውሳኔዋ ፀንታ ልጅዋን እንድትመግብ የሚያግዛት ወይም ሊያሰናክላት የሚችሉ ምክንያቶችን ቢገልፁልኝ?

- የቆርቆሮ ወተት፣ /የዱቄት ወተት/ የላም ወተትን እንዲት እንደሚያዘጋጁ በዝርዝር ይግለፁልኝ? ቀን/ማታ?
- እንዴት ነው ልጅዎትን የሚመግቡት /በኩባያ ወይንስ በጡጦ?
- ልጅዎትን በቀን 5-6 ጊዜ እያዘጋጁ መመገብ ይችላሉ? መልስዎ አይደለም ከሆነ ለምን? በጊዜ ማጣት፣ የሚያዘጋጁበት እቃ አለመሟላት?
- ልጅዎትን በደንብ የመመገብ አቅም አለኝ ብለው ያስባሉ?
- የቆርቆሮ ወተት ፣/የዱቄት ወተት/ የላም ወተትን እንዴት ያስቀምጡታል?
- ቤተሰብዎ የልጅዎን የአመጋገብ ዘዴ ደግፈውሎታል?
- እናቶች የወሰኑትን /ባቀዱት/ የአመጋገብ ዘዴ እንዳይተገብሩ ተጽእኖ የሚያሳድሩ ምክንያቶች ወይም የአመጋገቡን ዘዴ እንዲተገብሩ የሚረዱ ምክንያቶች ምንድን ናቸው? ሁለቱንም ምክንያቶች በዝርዝር ይግለጹልኝ?
- እኔ ያልጠየኩት ሌላ ማለት የሚፈልጉት ነገር አለ?

ጊዜዎን መሰዋት አድርገው ስለሰጡኝ አመሰግናለሁ::

Declaration

This thesis is my original work and has not been presented for a degree in any other university, and that all sources of materials used for the thesis have been acknowledged

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