

**LESSONS AND EXPERIENCES WITH EARLY ABRUPT CESSATION OF  
BREAST FEEDING AMONG HIV INFECTED WOMEN IN KAMPALA,  
UGANDA**

**BY**

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## **LIST OF ABBREVIATIONS AND TERMS**

MTCT - Mother to Child Transmission

FGD - Focus Group Discussion

KI - Key Informant

IFC - Infant Feeding Clinic

HIV - Human Immune Deficiency Virus

ARV - Antiretrovirals.

MU-JHURC - Makerere University-Johns Hopkins University Research Collaboration

PMTCT - Prevention of Mother to Child Transmission

UNICEF - United Nations Children's' Fund

WHO - World Health Organization

UNAIDS - Joint United Nations Programme on HIV/AIDS.

MU-JHU- Makerere University-Johns Hopkins University

HIVNET 012 - Code Name For the Single Doze Perinatal Nevirapine Trial

PCR - Polymerize Chain Reaction

LUGANDA - The Most Spoken Dialect in Kampala

POSHO - A maize Cake Commonly Eaten in Kampala

RESEARCH HOUSE/CLINIC - The Physical Facility Where the Study Was Conducted

COPING PHASE - Early Stage of Learning of One's HIV Status before Living Positively

EKITOBERO - A Fresh Rich mixture of Several Local Foods

ENKEJJE - A Type of Very Small Fish

## ABSTRACT

In order to evaluate the lessons and experiences learnt during early cessation of breast feeding, Focus Group Discussions (FGD) and Key Informant Interviews (KI) were conducted among 47 HIV infected HIVNET 012 clinical trial mothers who attended the Infant Feeding Clinic (IFC) and stopped breast-feeding by 7 months, and 36 health workers of Makerere University-Johns Hopkins University Research Collaboration (MU-JHURC) who supported them. The IFC had been established within the MU-JHURC to reduce MTCT of HIV through breast-feeding by counseling and support in early cessation of breast-feeding and replacement feeds. Some of these mothers were already practicing mixed feeding when they were invited to the IFC.

Majority of the mothers studied were housewives in their twenties with two to three children. A few mothers were either employed or in business.

Most of the children were 6 months old when they stopped breast-feeding with a range of age at cessation of 8 days to 6 months. The duration of mixed feeding ranged from one week to six months. About half of the mothers practiced mixed feeding for less than 2 months while 3 of them never practiced mixed feeding. In spite of mixed feeding, most mothers reported stopping breast-feeding their babies abruptly. The replacement feeds most commonly used included cow's milk, eggs, irish potatoes, passion fruit juice, soya, ground nuts sauce, ripe bananas millet and maize porridge, meat and fish soup, posho and vegetables.

Protecting their children from HIV infection was the major reason the mothers gave for early cessation of breast-feeding.

Many of the health workers acknowledged that early abrupt cessation of breast-feeding was a new and hard practice but that it raised hope for HIV positive women to produce and raise HIV negative babies. According to the health workers, hindrances to early abrupt cessation of breast feeding included fear of husbands, relatives, stigma from the general public, denial of sero-status, non disclosure of sero-status, lack of consistent information, cultural beliefs, low literacy levels, poverty, and lack of alternative feeds.

Both the mothers and health workers identified the major problems encountered by the mothers during cessation of breast feeding as engorgement of breasts, stress due to sleepless nights, domestic violence, pressure from in-laws and neighbors, financial constraints, intimidation from uninformed health workers who insisted on breast feeding, babies losing weight, falling sick and crying a lot. The health workers, together with the mothers solved these problems in different ways; many mothers used pain killers for engorged breasts, lied about why they were not breast feeding, got involved in income generating activities, and received nutrition education, food supplements and treatment for babies from the clinic.

Mothers who had less than 3 children, were working or single, had earlier on disclosed their HIV status to their spouses or relatives, or could utilize locally available foods tended to stop breast feeding by 4 months. Those who stopped breast-feeding by 4 months tended to practice mixed feeding for less than one month.

It is recommended that all stake holders in early cessation of breast feeding among HIV infected women should pass on the same message to avoid contradiction, create public awareness to minimize stigma, involve men and spouses to reduce

domestic violence and ensure close follow up of mother-infant pairs for on going support

## CHAPTER ONE

### INTRODUCTION AND BACKGROUND.

#### 1.1 The Problem of Pediatric HIV

About 1.3 million children are living with HIV infection in the world and 3.8 million deaths have occurred since the beginning of the AIDS epidemic. Mother to Child transmission (MTCT) of HIV, the predominant mode of HIV acquisition among children occurs intrauterine, intrapartum and postnatally mainly through breast-feeding. The risk of HIV transmission through breast-feeding is estimated to be between 7 and 22%<sup>1-6</sup>. Significant progress has, however, been made over the last five years in reducing perinatal MTCT of HIV by using affordable short regimens of Antiretroviral (ARV) drugs<sup>7-11</sup>.

#### 1.2 Prevention of Transmission of HIV Through Breast Milk

Reduction of postnatal MTCT of HIV is also feasible and several approaches are being promoted:

- Exclusive breast-feeding with early accelerated cessation<sup>4, 12</sup>.
- Replacement feeding<sup>3</sup>.
- ARV prophylaxis to breast-feeding babies, studies are underway to investigate this.

Replacement feeding where social, economic and environmental circumstances allow would be the ideal alternative but this poses the risk of increased infant mortality due to diarrheal diseases, pneumonia and malnutrition in sub-Saharan Africa where most pediatric HIV infections occur<sup>13-16</sup>. UNICEF, WHO and UNAIDS recommend that HIV infected mothers should be counseled and given the option to breast-feed or be supported to use other alternatives<sup>17</sup>. ARV prophylaxis to breastfeeding babies is under research but is likely to be expensive and involving.

Exclusive breast feeding with early accelerated cessation might be favored in many developing countries and it might be the most cost effective approach probably because it is cheap, safe, convenient and natural. But early cessation of breastfeeding is likely to have its attendant problems like stress of mothers and babies, stigma, lack of food and risk of mixed feeding<sup>18</sup>. How accelerated or abrupt the cessation should be is an issue of current debate but the Uganda Ministry of Health recommends a period of not more than two weeks<sup>19</sup>.

#### 1.3 Background Information

The MU-JHURC in Kampala is involved in conducting research in prevention of MTCT of HIV and caring for children born to HIV infected women. In 1999 the collaboration demonstrated through the HIVNET 012 clinical trial that a single dose of perinatal nevirapine to the mother and newborn reduces MTCT by 47%<sup>10</sup>. The children involved in the HIVNET 012 protocol are still being followed up for possible long-term effects of perinatal ARV. Mulago hospital, the study site for HIVNET 012 is currently offering perinatal nevirapine to consenting HIV infected women with

their newborns and supporting them in either replacement feeding or exclusive breast feeding with early accelerated cessation according to the Ministry of Health guidelines<sup>19,20</sup>.

While following up the HIVNET 012 clinical trial babies an Infant Feeding Clinic (IFC) was established within the MU-JHURC to further reduce MTCT of HIV through breast-feeding. HIV infected mothers nursing HIV negative babies, who were willing to stop breast-feeding before 6 months and could afford alternate feeds were invited to the IFC between May 1999 and June 2000. The HIVNET 012 clinical trial mothers did not receive comprehensive counseling about exclusive breast-feeding with early accelerated cessation during antenatal period, hence some of them were already practicing mixed feeding when they were invited to the IFC. They were given more information about the risk of HIV transmission through breast-feeding, alternate local feeds, and support in their choices of feeding. They were also counseled to stop breast-feeding by 6 months, if they hadn't, and to do it abruptly over not more than 2 weeks. A counselor, midwife, pediatric nurse and pediatrician ran the clinic. Of the 150 mothers invited to the IFC, 44.7% (67/150) stopped breast-feeding by 7 months. At enrollment in the IFC, there was no statistical significance in morbidity, growth or development between children who stopped breast-feeding by 7 months and those who stopped after 7 months<sup>21</sup>.

We, however, do not know the experiences of the mothers and babies during the process of early accelerated cessation of breast feeding in terms of breast engorgement, stress, mode of feeding, stigma, family support, abruptness of cessation or separation and how the mothers dealt with some of these problems. Neither do we know the effect of early cessation of breast-feeding on morbidity, growth and development at 18 months when the HIVNET012 protocol follow up ended.

In order to evaluate the experiences of HIV infected mothers and their babies during early accelerated cessation of breast feeding as well as the lessons learnt by MU-JHURC staff while counseling and supporting them, Focus Group Discussions (FGDs) and Key Informant (KIs) interviews were conducted among these mothers and health workers in December 2001.

#### **1.4 Rationale**

Analysis of the IFC and HIVNET 012 data of HIV infected mothers who stopped breast feeding by 6 months, and their babies, would reveal the relationships between socio-economic and demographic factors on the one hand, and infant feeding practices and infant growth on the other hand. Qualitative information from the mothers themselves and the health workers who had been supporting them would supplement this analytical information. When put together, these two pieces of information would be used to improve service delivery to HIV infected women regarding the practice of exclusive breast-feeding with accelerated cessation.

#### **1.5 Study Objectives**

1. To evaluate the experiences of HIV infected mothers and their babies during accelerated cessation of breast-feeding.
2. To establish the lessons learnt by the MU-JHURC staff while counseling and supporting HIV infected mothers in accelerated cessation of breast-feeding.

## CHAPTER TWO

### METHODOLOGY

A qualitative study, using FGD and KI was conducted at MU-JHU research clinic in December 2001. A two-day training session for research assistants was held at the beginning of the study at the MU-JHU conference room. Richard K Mugula, a social scientist from Grath and Gregor Associates Ltd, Margaret Achom and Teopista Nakyanzi both social workers from MU-JHU facilitated the training. The research assistants were introduced to the basics of conducting FGDs, KIs, data analysis and report writing. The question guides for FGDs were pre-tested on collaboration mothers who had stopped breast-feeding before 6 months but were not part of the IFC and appropriate changes were made to the guides.

All mothers who participated in the IFC, stopped breast-feeding by 7 months and were staying within 15 kilometres from Mulago hospital were invited to the MU-JHURC clinic for FGDs and KIs. The health visitors delivered the invitations at least two days to the appointment. After obtaining permission for participation in the discussions from the mothers, one to two hour FGDs of 6-7 mothers were conducted in a private room using the discussion guide (see Appendix 1). The discussions were conducted in Luganda (the local dialect) by a moderator and a note taker, and were tape-recorded. Similar FGDs were conducted among the nurses, research counsellors, Nevirapine Implementation counsellors and health visitors of MU-JHURC in English using a different discussion guide (see appendix 2). Six and four FGDs were conducted for mothers and health workers respectively. A verbal invitation to participate in the study was extended to all health workers of MU-JHU research clinic who were involved in caring for HIVNET012 babies or in the Nevirapine Implementation Program.

Key informant interviews were conducted for mothers who were especially active in the IFC or came too late for the FGDs, and key physicians, nurses, counsellors and health visitors using the discussion guides used in FGDs. Ten health worker KIs and 10 mother KIs were conducted all together.

The note taker recorded the discussions verbatim as well as by tape recorder and took note of all non verbal expressions during the discussion. After each discussion the moderator and note taker met to review and complete the notes taken during the discussion. The tapes were transcribed, translated into English and used for validating the notes from time to time.

Each piece of data compiled was then coded using themes identified in the discussions. The data was then sorted and grouped according to themes, and arranged in table and narrative form for interpretation and report writing.

## **CHAPTER THREE**

### **STUDY FINDINGS**

#### **3.0 Introduction**

The mothers involved in this study were those who were HIV infected, had stopped breast feeding their HIV negative babies by 7 months of age, had been followed up at the MU-JHU research clinic and were involved in the IFC. The mothers were selected by the investigator as per the study objectives. On the other hand, the health workers included doctors, nurses, health visitors, research and implementation counselors who were involved in the care of the mothers and their babies.

A total of 47 mothers participated in the study, 10 being key informants and the rest were involved in FGDs. There were 10 key informant health workers and 26 focus group discussants. Of the eligible health workers, one declined to participate in the study, five were away on leave and two were on the research team.

#### **3.1 Background Characteristics of Mothers**

The socio-demographic characteristics of the mothers studied included age, marital status, occupation and number of children. This was because such characteristics in one way or another had an influence on early abrupt cessation of breast-feeding.

The majority of mothers involved in this study were in their twenties. The youngest mother was 19 years while the oldest was 37 years of age.

Concerning the marital status of the study mothers an overwhelming majority of them were married. The single mothers were few and there were only two cases of widowed mothers. The study revealed that single mothers had more say on early cessation of breast-feeding as compared to their married counter parts.

Majority of the mothers in the study had two to three children. The lowest number of children was one child while the highest was 5 children. Mothers who had more than two children took longer to stop breast-feeding than those with one or two children.

The biggest portion of mothers was housewives. The rest of them included businesswomen, teachers, secretaries, a student and an actress. Working mothers and those in business managed to stop breast feeding their babies earlier than house wives because they could afford to buy replacement feeds for their children after cessation.

#### **3.2 Background Characteristics of Health Workers**

The MU-JHURC health workers who were involved in the study included 3 physicians, 7 nurses/midwives, 9 nevirapine implementation counselors, 7 research counselors and 9 health visitors. They were all involved in counseling and supporting mothers on early cessation of breastfeeding at different levels. All but the nevirapine implementation counselors had been working with the collaboration for more than 3 years. They were all female except one physician.

### **3.3 Views of Health Workers on Early Abrupt Cessation of Breast Feeding.**

Health workers expressed varying views on early abrupt cessation of breast feeding. A senior health worker said that *“this is a new idea, previously women used to breast feed, wean and stop gradually but with HIV these days, early abrupt cessation of breast feeding is encouraged. It is difficult but people have to know why they have to do it and appreciate it. To be able to achieve early abrupt cessation, confidence has to be built among women right from the start and the doctor -client (mother) relationship should be warm because it helps a lot in the success of early abrupt cessation of breast feeding”*.

*“In the African tradition, breast feeding is so much treasured and through breast feeding, mothers and children get an attachment and early abrupt cessation of breast feeding brings problems. Under normal circumstances the longer a baby breast-feeds, the more the brain grows and at the same time we tell mothers to stop because of HIV. This therefore puts mothers in a dilemma and they question themselves, if I do not breast feed what about the mental development of my baby”*, said a health worker.

*“Well, I think early abrupt cessation of breast feeding is good for HIV infected mothers and their HIV negative babies because it helps to reduce transmission of HIV to babies after birth (it reduces MTCT)”* said a physician.

Another health worker expressed the same view that *“early abrupt cessation of breast feeding saves young innocent babies. I have come across a mother who also told me that it is good because it has saved babies from acquiring HIV through breast feeding”*.

*“Early abrupt cessation of breast feeding has got psychological implications for the mother and the baby. Because it is abrupt, the mothers become stressed; they get engorged breasts, discomfort and fevers. Some babies lose weight, cry so much and become restless which further stresses the mothers”*, one health worker said. Another health worker had a similar view, *“the babies suffer a lot since they are introduced to other feeds they are not used to, they cry a lot and some mothers are forced to resume breast feeding”*.

### **3.4 Health Workers’ Definition of Early Abrupt Cessation of Breast Feeding**

According to one health worker, *“early abrupt cessation is when a mother breast feeds exclusively and then introduces other feeds with no more breast milk”*.

Another health worker said that *“early abrupt cessation of breast feeding is when HIV infected mothers are required to stop breast feeding completely at exactly 3 months and introduce other feeds minus breast milk”*.

*“Early abrupt cessation of breast feeding is exclusive feeding for the first 3 to 6 months, the baby is weaned over a week or two and then the mother completely stops”*, defined a health worker..

Another health worker however had a different definition *“Early abrupt cessation of breast feeding is roughly defined as stopping breast feeding without warning or prior arrangements to prepare the baby for it”*.

### **3.5 Age of Children at Cessation of Breast Feeding**

The age of children at cessation of breast-feeding ranged from 8 days to 7 months with the majority of the mothers stopping when their children were 6 months. A big

portion of the mothers who stopped breast feeding when their children were 6 months old were married. The rest of the mothers varied in the age of stopping to breast feed their children; some stopped when the children were 2, 3, and 4 months while about six mothers stopped when the children were exactly 7 months.

### **3.6 Reasons for Cessation of Breast Feeding**

The most common reason for stopping breast-feeding was health education given to the mothers by doctors, counselors, health visitors and nurses. Majority of the respondents said they stopped breast-feeding because they were educated on HIV and breast-feeding, and wanted to avoid infecting their babies through breast-feeding.

One mother said that, *“I stopped breast feeding my baby at 2 months because his blood was checked and found HIV negative and the health workers advised me to stop in order to save my baby from HIV infection through breast feeding”*.

Another mother said, *“I did not have breast milk and I had even been told by a doctor and nurse that sometimes if the baby stops breast feeding early she might be helped not to get infected with HIV from the mother”*.

Yet another mother said, *“I had decided not to breast feed even before delivery but the midwife forced me to breast feed. However, after 8 days I came to the clinic and consulted a doctor who counseled me and from that time I decided to stop breast feeding on my own as I had earlier wanted”*.

These responses re-emphasize the role of counseling mothers in relation to HIV and breast-feeding.

### **3.7 Duration of Mixed Feeding**

Majority of the mothers practiced mixed feeding, especially at the time when they were nearing cessation. The duration of mixed feeding ranged from 1 week to 6 months and 3 weeks with about half of the mothers practicing mixed feeding for less than 2 months. About 1/5 of the mothers took 2 weeks to one month practicing mixed feeding while 3 of them never practiced mixed feeding at all. The weaning foods included eggs, irish potatoes, cow’s milk, soya and millet porridge. One mother said, *“I started giving my child cow’s milk at two months and at four months I started giving other foods like eggs, passion fruit juice, and irish potatoes, and eventually stopped breast feeding at 6 months and my child did not have any problems”*.

The above findings confirm what one health worker (a counselor) said, *“mothers breast feed exclusively up to some point and then feel that their children need something else so they end up mixed feeding their babies”*.

The mothers practiced mixed feeding because they wanted the babies to get used to the other feeds while others thought that they did not have enough breast milk. *“I started mixed feeding when my child was one month old because I did not have enough breast milk, and I continued for three months when I completely stopped breast feeding”*, mother.

### **3.8 The Process of Stopping Breast Feeding.**

Majority of the mothers stopped breast-feeding their babies abruptly but had earlier on introduced other feeds like cow’s milk, eggs, irish potatoes, soya and ripe bananas.

According to one mother, *“after knowing that my baby was HIV negative, I decided to follow what health workers told me, that is, stop breast feeding. I breast fed for 3 months and I completely stopped at once and then started giving alternative feeds (milk + eggs)”*.

*“I stopped breast feeding abruptly at 6 months. I was told the child could bite my nipples and probably get HIV thought that, so I stopped there and then”*, FGD mother.

Another mother said, *“I stopped breast feeding abruptly and took my child to a day care center and at night I could feed her on milk, eggs, juice..”*

Other mothers however, stopped breast-feeding gradually. Mothers in this category started giving their babies other feeds during day and only breast fed at night when husbands or relatives were around but they eventually stopped after a week, two weeks or a month.

*“I stopped breast feeding gradually from 5 months by feeding the baby only at night and during day I used to give cow’s milk and since I had not revealed my sero status to anybody, I did not want to separate my baby from me because people would ask me and perhaps pressurize me to resume breast feeding”*, mother.

Mothers who were working practiced temporal separation from their babies and only breast fed during the morning, evening and night before completely stopping. Other mothers however completely separated from their babies and took them to relatives (grand parents and sister). *“I took my child to my mother in the village after stopping breast feeding and he lives there up to now, I was going to work and nobody would look after him”*.

With regard to putting pepper on the breasts, majority of the mothers expressed the view that pepper is put on breasts for older babies of one year and above but not babies of less than 6 months. *“Pepper is given to older children but not infants because they do not understand anything”*. But one mother used metronidazole in place of pepper, *“in stopping breast feeding, I bought flagyl, crushed it and applied on the breasts after mixing with water and when the baby sucked, it was sour and I did this for 3 days. So whenever the baby would want to breast feed, he would recall the bitterness and thus I stopped breast feeding”*.

In general the process of breast feeding involved mothers removing babies from the breasts abruptly while others did it gradually as they introduced alternative feeds while a few just separated from the babies.

### **3.9 Replacement Feeds After Cessation of Breast Feeding**

After stopping breast-feeding, mothers introduced other feeds that replaced breast milk. The replacement feeds varied from mother to mother depending on the age of the child and financial ability of the mother.

The majority of the mothers gave their children cow’s milk, eggs, passion fruit juice, irish potatoes, ground nuts sauce, ripe bananas, millet porridge, maize porridge, meat soup, fish soup, posho and other locally available foods including green vegetables.

The mothers revealed that health workers in the IFC taught them how to prepare “ekitoobero” (a mixture of many different food stuffs). After mixing these different food stuffs (milk, eggs, ripe banana, soya, mashed beans and others), and sieving the mixture if the baby was very young, mothers would then feed their babies several times a day and at night. *“I used to give my children cow’s milk, soya mixture, porridge and irish potatoes together with passion fruit juice at different intervals during day time. In the evening I could prepare ekitoobero as we were taught in the IFC and I used to feed the babies on that mashed and sieved food at night. The food through the sieve was helpful to the babies and it made them grow well”*, said a twin mother.

### **3.10 Factors That Favored the Success of Early Abrupt Cessation of Breast Feeding**

The study revealed quite a number of factors that have enabled early abrupt cessation of breast-feeding to take place among HIV infected mothers.

Majority of the mothers said that they were able to stop breast feeding early because of the health education and counseling that health workers gave them. Mothers revealed that they were educated on the advantages and disadvantages of continuing to breast-feed HIV negative babies. *“Health workers at the center helped me realize through counseling that I could actually produce and raise an HIV negative baby and when I gave birth and the child reached the age of 3 months I stopped breast feeding, he is three years old now and HIV negative”*, said a mother.

Health workers had similar responses, for example one said, *“health education and nutrition education helped the mothers a lot in the cessation of breast feeding because we taught them the dangers involved and how they should feed their babies after stopping”*.

Most mothers were able to stop breast-feeding because of disclosing their sero status to their husbands and relatives. The mothers who disclosed and shared results with their spouses were able to abruptly stop breast-feeding early and did not get problems from their husbands. *“I told my husband straight away even before the HIV test results were out. When I got the results I told him that I was going to stop breast feeding because of being HIV positive and he did not make any noise”*. Another mother also had the same experience of the husband being helpful after disclosing to him. *“Much as my husband was against me not breast feeding his child, when I told him the reason, he became helpful by buying milk, soya, millet flour, irish potatoes and he bought them in large quantities”*.

Another mother shared a similar experience, *“disclosing my status to my mother relieved me a lot because she helped me so much after understanding my problem, she took away the child, used to feed her and could even bring her to the clinic in Mulago when I was busy or away”*, said a mother.

Relatives and elderly women in the communities helped a lot of mothers when they stopped breast-feeding. *“I had an elderly lady and my neighbors’ daughter who could advise me on the types of food for the baby when I stopped, they could bathe my child and fed her whenever I was away”*, one mother said.

*“Being saved (born again Christian) helped me stop breast feeding because people at the church assisted me as their own sister and shared with me the Bible. My husband used to go away for about 2 months and the church people could help me out in that period”, FGD mother.*

According to the health workers, the success of early abrupt cessation of breast feeding is attributed to a number of things: Mothers whose spouses/relatives were supportive, single mothers, working mothers, educated mothers and mothers who revealed their sero status to their husbands tended to succeed in early abrupt cessation of breast feeding.

According to a senior health worker, *“on the whole, early abrupt cessation of breast feeding was successful among mothers who understood their condition and stopped abruptly, mothers who shared results with husbands and those who did not mix breast feeding with other feeds”.*

Another health worker however differed from the others and said that early abrupt cessation of breast-feeding still needs a lot to be done to succeed. *“Early abrupt cessation of breast feeding is 50% successful. This is because some mothers have consistently refused or are forced by conditions not to stop breast feeding”.*

Working mothers and those in business or whose level of income was reasonable succeeded in stopping breast feeding because they could afford buying alternative/replacement feeds without necessarily relying on husbands and relatives. According to a senior health worker, *“mothers who had jobs were able to successfully stop because they could afford to buy other feeds for their babies unlike those who entirely depended on husbands for support. In most cases the men were against early abrupt cessation of breast feeding and women who depended on them had a lot of problems in stopping breast feeding”.*

Single motherhood was a factor in stopping breast-feeding. Single mothers were not accountable to men and as a result found it easier to stop breast-feeding early unlike their married counterparts. *“When a single mother decides to stop breast feeding abruptly, no one asks her or harasses her to resume breast feeding unlike the married mothers, and a single mother can afford to buy alternative feeds like milk without relying on a man”,* said a health worker.

Education levels played a big role in early abrupt cessation of breast-feeding. Mothers who were able to understand the messages given to them during health education and counseling succeeded in stopping breast feeding early unlike those who were less educated. A health worker said that *“educated mothers and their husbands can easily understand the benefits of not breast feeding a child if the mother is infected with HIV which is not the case with an ignorant mother who might think that a health worker has a hidden agenda”.*

The negative results of the babies were also an encouragement to majority of the mothers who stopped breast-feeding. According to one health worker, *“mothers whose babies turn out to be HIV negative are encouraged to cease breast feeding immediately in order to save their babies so they top at exactly the time they are told to do so”.*

### **3.11 Hindrances to Early Abrupt Cessation of Breast Feeding**

According to the health workers, early abrupt cessation of breast feeding among HIV infected mothers had several hindrances, including; stigma, non disclosure, denial, low education levels, cultural beliefs, poverty, lack of alternate foods and lack of accurate information.

Mothers' not disclosing their sero status to their husbands after blood tests hinders early abrupt cessation of breast-feeding. A health worker had this to say about mothers not disclosing their sero status to husbands, *"one mother told me that if I let my husband know about my sero status, he will send me away and therefore my marriage will break up"*.

Another mother said, *"I have never told my husband and I do not intend to because he will chase me away from his house. I would rather continue breast feeding all the babies I get"*.

A major hindrance was the fear of husbands, relatives, in-laws and sometimes the general public. One health worker said, *"Mothers still fear their husbands and people around 'point fingers' at them. Our mothers are stigmatized and this fear hinders them from stopping breast feeding since it is becoming common knowledge that mothers who do not breast feed their babies are HIV positive in most cases"*

Another hindrance to early abrupt cessation of breast-feeding was lack of accurate information among HIV infected mothers that their HIV negative babies could actually survive without prolonged breast-feeding. Some mothers continue to breast feed their babies thinking that they will die after all. According to a senior health worker, *"we always tell the mothers facts on HIV in relation to prolonged breast feeding but when they go back to their communities, the public and the media (radio, television and news papers) give these mothers contradicting messages and as a result some of them refuse to stop breast feeding"*.

This is in line with what a mother in a focus group discussion said *"I am destined to die together with my child and on radio they tell us to breast feed as long as possible so I do not see any reason for stopping or denying my baby breast milk yet we are all going to die"*.

Closely related to lack of accurate information on cessation of breast-feeding, is denial among some mothers that their babies were HIV negative and therefore they continued to breast feed even after being told to stop. According to a health worker, *"some mothers just stubbornly deny and refuse to stop breast feeding. One mother was told that the baby was HIV negative, she became so happy but decided to continue breast-feeding reasoning that the machine that checked the baby's blood was faulty. The next time her child was tested, he was HIV positive"*.

Several counselors had also observed that mothers who had been in the "coping phase" of HIV infection did not succeed in early cessation of breast-feeding.

Societal customs or cultural beliefs also hinder early abrupt cessation of breast-feeding. A health worker, said, *"cultural beliefs hinder early abrupt cessation of breast feeding. For instance one mother said that if the baby is still alive, a mother should not waste breast milk by not breast feeding the baby, it's a taboo"*.

*“Other mothers believe that if you do not breast feed the child, he/she will hate you forever when he grows up and the child-mother bond will never be there”,* said another health worker.

Another factor that hinders early abrupt cessation of breast-feeding is the level of education. Literacy levels are low among most mothers, so they sometimes fail to understand why they have to stop breast-feeding. This is in line with what a health worker said, *“mothers who are educated can persevere, breast feed their babies exclusively and then stop abruptly but those who are less educated do not understand in most cases the importance of stopping breast feeding early”*.

Even lack of adequate knowledge about a baby getting infected with HIV through breast milk, according to another health worker hinders early abrupt cessation of breast-feeding. *“If a community or a person does not really understand how babies get HIV through breast feeding, they see no reason for stopping breast feeding since on radio they urge them to breast feed as long as possible”*.

High levels of poverty in the communities were also identified as a hindrance to early cessation of breast-feeding. A senior health worker said, *“poverty makes mothers so dependent on men and as a result they can not buy other feeds for the babies. This dependence on men hinders early abrupt cessation of breast feeding because such mothers have to ask for money to buy alternative feeds and have no excuse to give to the men for not breast feeding.”*

*“The lack of money to buy alternative feeds among poor mothers hinders early abrupt cessation of breast feeding because almost 75% can not afford alternative feeds”,* said another health worker.

According to a mother, *“poverty in communities is so rampant and when I thought of stopping to breast feed, and my child not depending on breast milk, I did not see where to get alternative feeds and when I stopped, it was very difficult for me and my husband because he was not working”*.

The lack of alternative feeds, which most mothers perceive to be milk and the lack of capacity to utilize the locally available foods like beans, ground nuts, maize flour, soya, *nkejje* and millet porridge have also hindered early abrupt cessation of breast feeding. This was a view that was given by both mothers and health workers as a hindrance to early abrupt cessation of breast-feeding.

### **3.12 Problems Mothers Faced During and After Cessation of Breast Feeding**

The study revealed that mothers who stopped breast-feeding early faced a lot of problems.

The most common problem was engorged breasts. The problem of engorged breasts came out strongly both from mothers themselves and the health workers who dealt with the mothers.

According to one mother in a focus group discussion, *“When I stopped breast-feeding, the breasts became swollen, were very painful and I developed severe fever that lasted over a week”*. Another mother said that the breasts became hard and had lumps inside which made them so painful and that there was a lot of milk that had to be expressed out all the time.

One health worker also emphasized the same, *“many mothers who came here at the clinic had that problem of engorged breasts and were seeking advice/information on how to overcome it”*.

The problem of babies falling sick was very common. Many mothers said that their babies fell sick at one time or another when they stopped breast feeding and the most common diseases were diarrhea, fever (malaria) and malnutrition as illustrated by one mother, *“One week after I stopped breast feeding my child started falling sick most of the time, used not to like eating and I struggled with her, she lost weight, had fever, vomiting and diarrhea”*.

A health worker also confirmed the same by saying that *“almost all the mothers after stopping breast feeding came to the clinic at one time with sick babies who had diarrhea in most cases until we advised them on proper care and feeding”*.

Apart from children’s sicknesses, mothers had problems with their husbands. Many of the mothers who stopped breast-feeding and had not revealed their sero status or the reasons for stopping to the husbands got problems. *“My husband was forcing me to resume breast feeding and he eventually chased me from his home when I told him the reason why I was not breast feeding”*, FGD mother.

Another mother expressed the same problem that *“my husband stopped buying anything for the baby when he realized that I had stopped breast feeding and left the child with my sister, he said that I was running around with other men, we quarreled so much and separated”*.

A health worker in a key informant interview also had come across a similar problem whereby a mother was chased away from the house after revealing to the husband; he sold all the cows and told the mother to resume breast-feeding. Eventually the marriage broke up.

***Case Study of a Problematic Husband of a Mother in a Key Informant Interview***

*“Despite the fact that my husband was well aware of my sero status, he was not helpful at all, mainly when it came to buying milk for the baby, instead I was just harassed, beaten and mistreated. Initially he could go for work leaving some money to buy food and milk. Since I knew my sero status and the risk of prolonged breastfeeding, I used not to have lunch and used the money to buy the child’s milk and sugar. I used to starve and if I had not been firm I would not have managed. I also used to have tea with no sugar. Time came when my husband became so serious and told me to leave his house yet I did not have anywhere to go since my mother was staying far away from where I was and I could not raise transport to her place. I resisted for the first time until he sold the mattress on which I was sleeping with my child. I really had a rough time, as I could not sleep on a wooden bed without a mattress. He also sold things like cups, plates and refused to pay house rent. When I saw all this, I left for a friend’s place where I stayed and I was treated as a human being. The neighbors wanted to know why I stopped breast feeding and relatives were almost forcing me to resume breast feeding but good enough my child never cried a lot because of breast milk since I started her on other feeds”*.

Closely related to the above issue was the problem of domestic violence with physical harm that several mothers experienced. *“One mother was severely beaten by her*

*husband because the man reasoned that he did not have money yet the mother had 'free milk' in the breasts”, said a health worker. A mother said, “I was beaten by the father of my child and our home became unbearable”.*

The problem of relatives, neighbors and in-laws putting pressure on the mothers to resume breast-feeding was also common. According to one mother, *“Why did you stop breast feeding? My neighbors could ask me all the time! You are not working and your parents look after you, why don't you breast feed the baby? My in-laws also asked me why I was not breast feeding and I told them that I was sick and the breast milk was bad for the child but they vehemently refused to accept it and continued to disturb me”.*

Other problems according to the findings included unwanted pregnancies since some mothers conceived easily when they stopped breast feeding, crying babies, sleepless nights because of preparing feeds and feeding the babies, husbands feeling neglected (poor sexual life) because all the attention went to babies and intimidation from health workers who were not knowledgeable about early abrupt cessation of breast feeding.

Lastly, the majority of the mothers had financial constraints that made them fail to access replacement feeds. Both the mothers and health workers expressed this problem as a big impediment that mothers who were poor faced when they stopped breast-feeding early.

### **3.13 Solutions to Problems Mothers Faced**

Mothers and health workers devised a number of solutions to overcome the problems faced in early abrupt cessation of breast-feeding.

With regard to engorged breasts, majority of the mothers said that they were advised by health workers to use medicines (pain killers) like aspirin, paracetamol and to take a lot of cold drinks to reduce pain and milk production. Mothers also said that they tied banana leaf veins (usually cold and moist) around the breasts and breast milk production and pain stopped. Others however used firm brassieres, coffee, cold compress and local herbs.

On the problem of husbands, relatives and neighbors the majority of mothers lied that they were sick, babies refused breast milk or had problems with their breasts and that health workers had advised them not to go on breast feeding.

*“Most mothers agreed that they told husbands and relatives one lie or another as to why they were not breast feeding and many of them talked about sickness, work and other problems”,* FGD health worker.

For crying babies, mothers said they constantly fed the babies on other feeds, the grand mothers took the babies and cared for them, other mothers bought toys for their babies to play with. *“During the time of crying, I used to carry her, sing for her and give her something to eat or drink and eventually she stopped”,* KI mother.

Health workers advised the single mothers and those who had financial constraints to devise ways of generating some income in order to be able to buy the basic needs when they stop breast-feeding. This is called “social counseling” of mothers. *“I went to my mother, who gave me twenty thousand shillings that I used to buy immediate needs and started a small business”,* FGD mother.

With regard to feeding, majority of the mothers said they got nutrition education from the IFC.

With regard to babies falling sick, majority of the mothers said that they came to the clinic where they got help in form of treatment for the children and themselves. At the clinic, mothers were also counseled, given food supplements, children with severe malnutrition were referred to Mwanamugimu Nutrition Unit, and the mothers were also taught through demonstration how to use locally available foods rich in protein like beans, ground nuts, eggs and “enkejje” (small fish).

### **3.14 Resuming Breast Feeding**

Mothers had strong beliefs against resuming breast-feeding and majority of them said that it is not a good idea. *“Culturally, it is not allowed to resume breast feeding after stopping because the baby can fall sick”*, FGD mother. *“Resuming breast feeding after cessation is not good because the baby may acquire HIV in this period. This is why I refused to resume breast feeding much as my husband put me under pressure”*, KI mother.

*“When I was told that my child was HIV negative I was very happy and decided never again to breast feed. It never occurred to me that I should resume breast-feeding. Since I was told of the child’s results, there was no need of resuming breast feeding”*, KI mother.

*“It is not a good thing to resume breast feeding after stopping, it can make the baby sick because the breast milk will have gone bad”*, FGD mother.

According to the above mothers, resuming breast-feeding was never an option much as some of them went through very hard times and were harassed by men.

### **3.15 Recommendation for Successful Early Abrupt Cessation of Breast Feeding**

For early abrupt cessation of breast feeding to succeed, mothers and health workers involved in the study recommended the following: -

The majority of study mothers recommended that men should be involved in early abrupt cessation of breast-feeding right from the antenatal clinics. *“The men should be targeted since they are the major threat to early abrupt cessation of breast feeding. They are the most problematic and therefore any efforts towards implementation of early abrupt cessation of breast feeding should focus on them because even if people are poor and can not afford alternative feeds, once a man is involved and he understands, they can go through the whole process peacefully”*, KI mother.

Peer group counseling by mothers who have already gone through early abrupt cessation of breast feeding should be used to show other mothers examples and assure them that early abrupt cessation of breast feeding is really possible. *“Some of us mothers should act as role models to others who are still doubting that an HIV positive woman can produce and raise an HIV negative baby. For instance, I was encouraged by a mother who has so far produced two HIV negative babies in the project”*, FGD mother.

*“All health workers should give the same information (talk the same language), be knowledgeable on cessation of breast feeding and there should be a chain of information, for instance, what a counselor tells a mother should be the same as a*

*health visitor or doctor regarding early abrupt cessation of breast feeding”, FGD counselor.*

Health workers recommended that the mass media should give HIV infection in the mother as an exception to breast feeding babies for two years because of the risk of getting HIV infection through breast milk.

A senior health worker recommended that government through the ministry of health should collaborate more with research centers to ensure that they work closely in order for early abrupt cessation of breast feeding to succeed. The government political will is very vital.

A mother suggested that mothers with the help of the health workers, should join and form income generating projects and clubs that can educate them on health matters and support them financially when they stop breast feeding early or when the children fall sick. The mother said that this would help them not to depend solely on husbands when they stop breast-feeding.

More mothers and fathers with HIV negative babies should be given nutrition education and urged to make use of locally available protein rich foods like eggs and beans. They should be taught how to prepare feeds like “ekitoobero” and also how to feed the babies. This will reduce cases of malnutrition and children falling sick all the time.

## **CHAPTER FOUR**

### **DISCUSSION AND RECOMMENDATIONS**

#### **4.1 Introduction**

The major objective of this study was to evaluate the experiences of HIV infected mothers and establish the lessons learnt by MU-JHU staff regarding early abrupt cessation of breast-feeding. By and large, this was achieved as reflected in reasons for cessation of breast feeding, views of the health workers, factors responsible for the success of cessation, hindrances and problems experienced during early abrupt cessation of breast feeding, the solutions and recommendations made by both the mothers and health workers.

#### **4.2 Discussion**

Single motherhood, being employed or in business and having less than three children are factors that favored earlier abrupt cessation of breast feeding among the mothers studied. Mothers who had fewer children tended to stop breast-feeding earlier than those with more children probably because they could afford alternative feeds since they had less demands from other children. Working mothers have some degree of financial independence and more say in decision making at home, which factors could have facilitated earlier cessation of breast-feeding in this group of mothers. Single mothers were successful in early abrupt cessation of breast feeding since they did not require spouses' consent, had less pressure from extended family members and they had full control over their money. On the contrary, married mothers tended to stop breast-feeding later than the single ones.

Saving their babies from contracting HIV infection through breast-feeding was a major reason for stopping to breast feed by the HIV infected mothers. This was complemented by an early HIV test so that most mothers knew their babies' status by 14 weeks of age. This was a unique group because the research could afford HIV PCR test, which is not possible in many centers currently implementing PMTCT of HIV in developing countries. But percentages ranging between 40-60% of mothers choosing formula feeding at delivery in different centers in Uganda suggest that the desire to have an HIV negative baby rather than available negative test for the baby influences the decision. The perception that mothers had inadequate breast milk also influenced the decision for early abrupt cessation of breast-feeding. Whereas this perception has been a big negative factor in promoting breast-feeding in Uganda it might be a stepping-stone in early abrupt cessation of breast-feeding among HIV infected women. The MU-JHURC health workers usually advise HIV infected mothers to stop breast-feeding and switch to another alternative food as soon as they feel they do not have adequate breast milk.

The majority of the mothers in the study practiced mixed feeding for a period ranging from one week to 6 months before they stopped breast-feeding. Mixed feeding has been observed in several operational studies conducted in Uganda especially after 3 months of age. According to the Uganda Demographic and Health Survey of 1995<sup>22</sup>, the national median age of exclusive breast-feeding was 3 months and that for urban mothers was 1.8 months. Poor R. et al found that the ideal age for introduction of supplementary foods according to women in South West Uganda was 3 months<sup>18</sup>. According to Baume C, maternal perception of inadequate milk, poor weight gain, employment and health providers' recommendation are major factors in mothers' decision to introduce other feeds<sup>23</sup>. Since the mothers in the present study did not have intensive counseling about exclusive breast-feeding during antenatal clinics,

their practice of mixed feeding reflects the national practice. Indeed a number of the mothers were already mixed feeding when they joined the IFC. But even with shortened mixed feeding of not more than 2 months many infants can be saved from acquiring HIV infection. Only one of the 49 babies born to the women involved in our study is thought to have got HIV infection through breast-feeding.

Whereas the health workers strongly viewed breast feeding as the natural, normal and cultural way to feed infants, they felt it necessary to save babies from getting HIV infection through breast milk and were, therefore, determined to work with the mothers through the hardships and stress involved in early abrupt cessation of breast feeding.

They went on to identify several hindrances to early abrupt cessation of breast-feeding many of which were cited among the problems encountered by the mothers. Stigma was identified as the biggest stumbling block to early abrupt cessation of breast-feeding. Because most mothers first learn of their HIV status during antenatal care, issues of PMTCT come in before they coped with their own infection. Many of them do not disclose their HIV status to their husbands or relatives and it is difficult to explain why they stop breast-feeding early. These circumstances, coupled with the spreading word that women who do not breast feed or stop breast-feeding early may be HIV infected work together to prevent women from stopping to breast feed early. Closely related to stigma, the "coping phase" was identified as a hindrance to early abrupt cessation of breast-feeding. The counselors involved in the study had come across several mothers who in the process of coping with their own HIV status could not comprehend early abrupt cessation of breast-feeding. This was compounded by yet another group of mothers who did not believe that their children were HIV negative, which also interfered with decision for early abrupt cessation of breast-feeding.

Lack of alternative feeds among the mothers studied was noted to be a big hindrance to early cessation of breast-feeding. Most of the mothers involved in the study were housewives from the suburbs of Kampala where poverty is rampant. One issue raised in relation to alternative feeds was the inability to utilize locally available high protein foods like beans, groundnuts or peas for replacing breast milk. It was observed that mothers perceive cow's milk as the alternative food without considering the locally available cheaper foods. There is no established locally available and cheap alternative infant feed to breast milk, and it is a big problem for mothers to improvise appropriately.

The health workers thought that early cessation of breast-feeding was not all that successful, they rated it as fair or 50% due to some of the hindrances here discussed.

The process of stopping to breast feed among the study mothers was mainly perceived as abrupt in spite of most of them practicing mixed feeding. Majority of them decided to stop breast feeding and immediately effected it while the rest of them preferred to breast feed at night and give other feeds in the day before eventually stopping. The latter group wanted to save their babies of the shock and stress of early abrupt cessation of breast-feeding. In this population, abrupt cessation of breast-feeding was feasible after practicing exclusive breast-feeding and 3 of the mothers were able to do

this after minimal prior counseling. The popular practices of applying pepper on the breasts or separating the babies from their mothers were not experienced except in a few instances. The mothers thought that babies below one year are too young for such practices. The babies coped well irrespective of the process of cessation of breast feeding; abrupt or gradual following mixed or exclusive breast-feeding.

Many mothers were able to use locally available foods in abruptly weaning their babies with innovative methods of preparing it like sieving in order to feed the little babies.

Both the mothers and health workers recognized counseling and health education about early abrupt cessation of breast-feeding as the biggest enabler. Counseling and health education in infant feeding for HIV infected women was a new concept for the mothers and health workers three years ago when the IFC was functional. The UNICEF, WHO, and UNAIDS Infant Feeding Guidelines for Decision Makers had just been published and the health workers found them useful. During the current study health workers discussed knowledgeably because some of them have already undergone training in HIV and infant feeding sponsored by WHO.

Timely disclosure of HIV status to the spouses and relatives generated support from these people for HIV infected mothers who stopped breast-feeding early. But mothers who disclosed because they were about to or had stopped breast-feeding had a worse outcome than those who disclosed soon after they had the test in antenatal clinics. According to unpublished data from our center, only 29% of mothers in our research protocols disclose their HIV status to their spouses. Couple counseling, which is not popularly done in our center because of spouses' unavailability would go a long way in promoting early cessation of breast-feeding. We have recently launched a campaign for men's involvement at our center and results are promising. We shall soon open men's after work clinics.

Community support from neighbors and church did very well for a few mothers. This was irrespective of whether they knew why the mothers had stopped breast-feeding early or not. There is need to mobilize and build on this kind of support.

The problems of engorged breasts, crying babies, sleepless nights, and lack of alternate feeds were very common but were easily solved by the mothers with the help of the health workers. Sleepless nights, however introduced a secondary problem, no time for sex and probably no interest in sex, due to fatigue and stress. Whether this contributed to the rampant domestic violence experienced by the mothers was not clear. But all these circumstances culminated into serious domestic violence in form of quarrels, withholding of food and household property, desertion or physical harm to the mothers. The mothers were so emotional about their spouses harassing them and quite a few had separated from their husbands at the time of the present study. Marriage and family counseling are not aspects that many of our health workers handle. Unfortunately many of these mothers were not in stable relationships, they were either second wives or in customary marriages.

The problem of babies falling sick after stopping to breast feed is not unique to this group, it is known that replacement feeding comes with increased infant morbidity

and mortality due to increased risk of gut infection through food handling and lack of protective immunity from breast milk. Our babies survived partly because they had support from the clinic in terms of doctors, laboratory tests and medicines. One problem highlighted at the implementation site is lack of curative services for the minor ailments that mothers and babies followed up present with. About 3 mothers involved in this study were intimidated by health workers for not breast-feeding when their babies were admitted in hospitals. Two of them had to painfully reveal their HIV status to the health workers before they were allowed to continue without breast-feeding. One health worker joined with a father to force a mother to temporarily resume breast-feeding.

Whereas it had been postulated that mothers might resume breast-feeding after cessation due to lack of alternate feeds, it was learnt in this group that resuming breast-feeding after cessation is both culturally and medically wrong. Mothers strongly asserted that breast milk gets spoilt if a baby stops breast-feeding and will make the baby fall sick if it is resumed. While this belief has been classified as detrimental by researchers promoting breast-feeding in the general population, it gives leeway for HIV infected women being forced by family or financial pressures to resume breast feeding.

The recommendations made by both the health workers and mothers for future successful early cessation of breast feeding reflect what is on their hearts; men's, community, health workers and political involvement.

#### **4.3 Recommendations**

This sub-section presents the recommendations of the investigator regarding appropriate courses of action to be undertaken to ensure that early cessation of breast-feeding is successfully implemented. These recommendations are directed to all the stakeholders.

In promoting breast feeding for women who do not know their HIV status and preventing MTCT of HIV through breast feeding among infected women all the researchers, health workers, politicians, government, the community, mass media and donor agencies should pass on the same message regarding early cessation of breast feeding to avoid contradiction.

All the stake holders like the government, Ministry of Health, research organizations, community leaders, general public and donor agencies should come out and embark on a major sensitization and public awareness campaign on early abrupt cessation of breast feeding. This will make it a public issue and mothers will not have anything to worry about any more.

Men should be involved in the implementation of early abrupt cessation of breast-feeding right from the antenatal clinics. The antenatal clinics, lab our wards and postnatal clinics should be designed to be men friendly right from physical structures to health workers. Couple Voluntary Counseling and Testing in antenatal clinics should be advocated for. Family and marital counseling should become part of the follow up package for PMTCT in order to reduce domestic violence.

In order for early abrupt cessation of breast feeding to succeed in PMTCT programs, a close follow up of mother-infant pairs for on going support in terms of counseling, growth monitoring, nutrition education, food supplementation and curative services are important elements.

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## **APPENDICES**

### **1) Discussion Guide For Mothers:**

1. What age was your child when you stopped breast-feeding completely? (*Probe reasons for stopping to breastfeed at that age?*)
  2. How long did you take giving both *breast milk* and *other feeds* like cow's milk, porridge, juice or solid food?
  3. How did you exactly stop breast-feeding? (*Probe for abruptness, separation, pepper, night breastfeeding*)
  4. What problems did you face when you stopped breast-feeding? (*Probe for engorged breasts, crying baby, lack of food, husband's attitude, extended family, neighbors and night feeding*).
  5. How did you deal with these problems? (*Specifically ask about engorged breasts, family and crying baby*)
  6. How did you feed your baby during the process of stopping to breastfeed? (*Probe for foods given during cessation and the following months*)
  7. What things or people were most helpful in the process of stopping to breast-feed? (*Probe for husbands, extended family, health workers, disclosure, food availability*)
  8. What problems did you get with health workers or relatives after stopping to breast-feed? (*Probe for harassment and pressure to resume breastfeeding*)
  9. How did you deal with those problems?
  10. What do you think about resuming breastfeeding after cessation? (*Probe for experiences with this practice*)
- What should be done to help women stop breast-feeding early?

### **2) Discussion Guide for Health Workers for FGDs and KIs:**

1. What are your views about *early abrupt cessation* of breastfeeding? (*Probe for working definition of early cessation*).
2. How *successful* is early abrupt cessation of breast-feeding *among the women you work with*? (*Probe for abruptness of cessation among the women*)
3. What are the main factors responsible for the success of early abrupt cessation of breast-feeding?
4. What factors hinder early abrupt cessation of breast-feeding?
5. What problems do mothers face during early abrupt cessation of breast-feeding? (*Probe for engorged breasts, crying baby, feeds, pepper, separation*)
6. How do you help the mothers to deal with these problems?
7. What are your recommendations for successful early abrupt cessation of breast-feeding among HIV infected women?