

Women's autonomy in infant feeding decision-making: A qualitative study in Nairobi, Kenya

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Abstract

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Background: Exclusive breastfeeding (EBF) is the optimal way to feed young infants. Guidelines recommend that HIV-positive mothers on antiretroviral therapy (ART) should EBF for at least one year to reduce the risk of mother to child transmission of HIV (MTCT). Mothers may face social or logistic barriers making it difficult to EBF.

Methods: This qualitative research was nested within a longitudinal study of intensive maternal counseling to increase EBF. HIV-negative and HIV-positive mothers were recruited from four public clinics in Nairobi. Women participated in focus group discussions (FGDs) that explored beliefs about and experiences with infant feeding. Conventional content analysis was used to describe and compare barriers and facilitators influencing HIV-positive and HIV-negative women's EBF experiences.

Results: We conducted 17 FGDs with 80 HIV-positive and 53 HIV-negative women between 2009- 2012. Overall, mothers agreed that breastmilk is good for infants. However, early mixed feeding was a common cultural practice. HIV-positive women perceived that infant feeding methods and durations were their decision. Autonomy in decision-making was facilitated by receiving EBF counseling and family support, especially from male partners. HIV-positive women reported healthier infants. In contrast, HIV-negative women reported less autonomy and more mixed feeding, citing peer pressure. Low milk production was a barrier to EBF, regardless of HIV status, and perceived to represent poor maternal nutrition.

Conclusions: Despite challenges, EBF was a preferred practice after counseling, which empowered HIV-positive women to advocate for EBF with spouses and family.

Introduction

The World Health Organization (WHO) recommends that “Mothers living with HIV should breastfeed for at least 12 months and may continue breastfeeding for up to 24 months or longer (similar to the general population) while being fully supported for ART adherence”¹. Exclusive breastfeeding (EBF) is associated with a lower HIV transmission risk than mixed feeding and protects infants from morbidity and mortality². There are several potential mechanisms for reduced HIV transmission associated with exclusive breastfeeding, which may limit passage of breastmilk virus from the infant's gut to the systemic circulation. Therefore, EBF is recommended for HIV-positive women for the first 6 months of life unless replacement feeding is acceptable, feasible, affordable, sustainable and safe for them and their infants³.

According to the Kenya Demographic and Health Survey, 99% of children in Kenya are ever breastfed⁴, however the rates for EBF for the first six months of life are considerably lower. About 60% of Kenyan children are exclusively breastfed until 6 months⁴. A study found that while prevention of mother-to-child-transmission of HIV (PMTCT) programs have been able to decrease the prevalence of HIV-positive infants, the children with higher odds of infection are those whose mothers mixed feed in comparison to EBF².

Factors that influence breastfeeding practice are not well understood and may include maternal level of education, socio-cultural factors, living environment, partner involvement in the care of the child, socioeconomic status, food insecurity and perceived milk insufficiency⁵. A study from Kenya found that women who practice mixed feeding at 6 weeks perceived crying as hunger (74%), believed that baby was old enough to start eating other foods (14%), lacked privacy for breastfeeding (11%), and felt pressure from relatives and spouses (20%). The foods introduced at 6 weeks were non-human milk (44%), water (29%), and fruits (18%)⁶. Factors that affect exclusive breastfeeding rates are setting-specific and vary due to cultural and local circumstances, which reflects the importance or understanding these factors in order to provide appropriate interventions. HIV-positive women may have unique barriers to exclusive breastfeeding. Nevertheless, women who received health education and had peer counselor and partner support were able to exclusively breastfeed⁷.

Different strategies for increasing exclusive breastfeeding rates, such as contact with health personnel in the early postpartum period and multiple home visits with counseling by peer counselors have been tested⁸. However, in resource constrained settings, many of these strategies are limited in feasibility or practicality and have therefore not been implemented on a wide scale in the public health care system. Furthermore, studies have not investigated the impact of interventions on breastfeeding practice among HIV-positive women, where increased exclusive breastfeeding and reduced breast pathology could have a profound effect on infant HIV acquisition. In areas with high HIV prevalence, there is a need to attain higher exclusive breastfeeding rates at the population level to achieve international feeding recommendations. Understanding the factors that influence women's infant feeding decisions and their strategies for dealing with barriers can help plan and implement appropriately targeted interventions.

Methods

Study Design and Population

The purpose of this qualitative study was to explore barriers, facilitators and community norms influencing EBF practices. This study is nested within a longitudinal study that sought to determine whether intensive breastfeeding counseling for HIV-positive women would reduce Mother-to-child transmission of HIV (MTCT) and decrease occurrence breast pathology⁹. The study also included a qualitative component that evaluated the impact of breastfeeding counseling on breastfeeding practices⁷. Data for all study activities were collected at six clinics in Nairobi, Kenya. These clinics were selected because they served large numbers of HIV-positive and HIV-negative pregnant women.

Sampling and recruitment

Women who participated in the FGD were recruited at four clinics in Nairobi, Kenya: Baba Dogo, Dandora, Kangemi and Riruta, where they received antenatal or postnatal services, using quota sampling to capture women with diverse EBF counseling intervention exposure and varied HIV status. This sampling strategy was employed to enhance understanding of community norms and include perspectives of participants that face different barriers to EBF. Women enrolled in the study met the following inclusion criteria: pregnant or

postpartum, ≥18 years, fluent in English or Kiswahili, and willing and able to provide written informed consent.

Data collection

A total of 17 FGDs were conducted with 8 to 10 women per group from October 2009 to March 2012. Five FGDs were conducted before the intervention with HIV-positive women, and 12 after the intervention; six with HIV-positive and six with HIV-negative women. Women were divided into groups of the same HIV infection status in order to have group homogeneity, and to reduce inhibitions to discuss issues freely. FGDs were conducted by social scientists trained in formative research with experience in conducting focus group discussions and in-depth interviews and notes were taken during discussions. Interviewers and note-takers spoke English and Kiswahili. A semi-structured guide was used to explore beliefs about and experiences with infant feeding practices, including barriers and facilitators that women face when they intend to exclusively breastfeed. FGDs were audio recorded with participants' consent and ranged in length from 60 to 120 minutes. All FGDs took place in the morning hours with the presence of infants. Notes were completed collaboratively by discussion leaders and note takers. FGDs were transcribed verbatim and later translated from Kiswahili to English by the investigators. A sample of FGDs were back translated to Kiswahili to ensure accuracy.

ERC/IRB approvals

Ethical approval was obtained by the UW Institutional Review Board (IRB) and by the Kenya Medical Research Institute Ethical Review Committee. Written informed consent was provided by all women to participate in the study.

Data analysis

Transcripts were analyzed using directed content analysis¹⁰ using a socio-ecological framework adapted for breastfeeding^{11,12}, where factors influencing breastfeeding are divided into individual, group and societal levels. A preliminary codebook was developed by two coders through an iterative process of reading transcripts and meetings with the larger team to confirm interpretation. Using a hierarchical structure, codes

and sub-codes were categorized into domains that could be adapted to the socio-ecological framework for breastfeeding. Prior to independent transcript review, coders applied the same codebook to a subset of transcripts to ensure consistent understanding and application of the codebook. Using ATLAST.ti version 8, each coder independently coded half of the transcripts, then switched and reviewed the other's code application. Coded transcripts were exchanged between coders and reviewed to ensure accuracy. All disagreements in code application were resolved through group discussion. Queries were used to generate reports by thematic area and summarized into memos that described and compared barriers and facilitators influencing HIV-positive and HIV-negative women's experiences with EBF.

Results:

A total of 133 women participated in 17 FGDs including 80 HIV-positive and 53 HIV-negative women. Most mothers reported that they were married (75%). Women reported being economically dependent on their husbands (64%), relying on themselves (16%) or their family (9.5%), or had shared economic responsibility with their husband (9.5%). Almost all women reported some access to education, with approximately half (40%) reporting receipt of primary level education and the other half (47%) reporting receipt of secondary level education. Women came from nine different ethnic groups.

Analysis revealed nine main themes as key influences on EBF practices. Themes were organized around the conceptual framework from Hector et al (Figure 1) and were compared across the three populations (HIV-positive with EBF intervention, HIV-positive without EBF intervention, and HIV negative) to evaluate if these key concepts differentially influenced women's decision-making practices or capacity. Quotes from participants are used to demonstrate relevant findings.

Individual level

Women's autonomy was found to be an overarching theme linking to all other identified themes. Multiple factors contributed to women's agency in infant feeding decision-making and ultimately led to their success or failure to accomplish their infant feeding goals. In general, women described being the ones in charge

of deciding what to feed their infants since they are the ones that spend more time with their babies, and are the ones directly receiving advice from the doctors.

“At times maybe the baby gets sick when your husband is at work or even when he is at home, he can't help you at that time. It will be upon you to look for money to take the baby to the hospital, so the decision will be upon you as the mother; because as a mother you are the first parent of the baby, because you will be with him/her most of the time. Therefore, you must take a stand; you should not be swayed”– HIV positive woman post-intervention

Women's autonomy was further enhanced for HIV-positive women, especially those who participated in the intervention. HIV status conferred women with more authority to follow healthcare workers advice more closely. HIV-positive women post-intervention were more likely to report their decision was either respected or they would take a stand to have their decision respected.

*“You should not listen to them; you should stand for your right and know that your child will be breastfed exclusively, and you should even get stern with them and no one will interfere with you.”
– HIV positive woman post-intervention*

In contrast, while HIV-negative women perceived EBF as beneficial for the infants' health, they were less likely to resist pressure from their partner, family, mother-in-law and neighbors to practice mixed feeding. Regardless of their HIV status, all women perceived attending the clinic and getting advice/knowledge from health care workers as a facilitator for intended infant feeding decision-making.

Although participants viewed breastfeeding as the best option to feed their infant, and most women breastfed their infants for prolonged periods of time, some women introduced other food before their infants turned six months of age. Early introduction of foods was a prevalent feeding norm expressed by all women. HIV-negative women were more likely to follow these norms, while HIV-positive women were more likely to stand up for their decision to EBF. One of the most frequent reasons for introducing foods early was lack

of maternal nutrition, which women believed was a key factor involved in the production of breastmilk. Perceived inadequate maternal nutrition was presented as a rationale for needing to supplement their infant's diet with other foods before reaching 6 months of age.

“I can decide to breastfeed my baby but the economy is tough. It is very expensive, sometimes you breastfeed the whole night. I have to take porridge to renew my strength and produce breast milk. If not so, the baby might die hungry. You try to eat to produce milk.” – HIV positive woman post-intervention

Some women were concerned about the effect of breastfeeding on their physical appearance. In several FGDs, HIV-negative and some HIV-positive women perceived that breastfeeding could cause their breasts to lose shape and reported that their male partners reinforced this idea. Women felt the need to feed their infants with other food or formula in order to avoid this.

“And there are some husbands who complain that their wives are becoming shapeless because of breastfeeding, so they just decide to give the baby food...” – HIV negative woman

Community level

We described contrasting opinions about partner involvement. Partners who were not interested in getting tested for HIV or attending clinic were less likely to respect women's decisions to EBF.

“The baby used to cry and she would be told, “Give this baby food”. He is hungry’ the mother says no, because they were taught to breastfeed for six months. Then the husband starts quarrelling and gets violent...” – HIV negative woman

Despite receiving counseling and having knowledge about the benefits of EBF, women faced constant pressure from family members, including their mothers-in-law, to introduce food early. Women from the HIV-negative FGDs felt disempowered in infant feeding decision-making compared to women in the HIV-

positive post-intervention FGDs when considering giving in to external feeding pressures. HIV-positive women were less likely to be deterred by feeding advice from non-healthcare workers. Regardless of HIV status, women whose infant was their first child or who lived with their mother-in-law were more likely to rely on their family's guidance and give in to pressures to introduce other foods early.

Women were also concerned that EBV limited their ability to make their infant fat, a desired feature because it represents a healthy baby. Women described compared their infants to their neighbors or family and being swayed by their feeding practices if they could make their baby appear healthier.

“Most people despise this system of exclusive breastfeeding for six months. You will be instructed by the doctor but when you enter your neighborhood people will tell you that’s stupid, that you need to give a child food in order for the child to grow fat and they even compare your child with others and tell you how they are healthy because of the other foods they eat. They believe this idea of exclusive breastfeeding for 6 months is foolishness.” – HIV negative woman

Women in the HIV-positive FGD not exposed to the intervention and HIV-negative women perceived competition among women as unsupportive interactions that reduced their sense of autonomy in infant feeding decision-making. In contrast, women in the HIV-positive FGD felt that the counseling they received promoted a supportive environment amongst women. In addition, among the few women who mentioned that they had support from their community, this support improved their ability to adhere to their infant feeding decisions.

Societal level

All groups mentioned that returning to work negatively influenced EBF but was expected and allowed them to contribute to household income. A combination of lack of maternity leave, and lack of knowledge among infant caregivers about the importance of EBF, challenged women's ability to maintain EBF for 6 months. Women who expressed milk feared that their milk would become contaminated by their infant's caregiver or wouldn't be fed to the infant due to fear of it "going bad".

“Like me, I tried it once. I expressed the milk and left it with someone. I had not introduced the idea to them. I just told them that I had expressed some milk for the baby. On the second day, she told me not to do that. She said that I was just doing something which was dirty... So, she bought some more milk, boiled it and gave it to the baby. So, I saw that there was no need of expressing the milk and I decided to buy milk.” – HIV positive woman post-intervention

Women viewed as being able to successfully navigate EBF when going back to work, were those with supportive partners, who were given maternity leave, who have access to breast pumps and had an alternative caregiver who was willing to feed their infant expressed breast milk.

Breastfeeding mothers described that lack of knowledge about health issues from other mothers, their partners and families as something that obstructed their decision to EBF. They mentioned a difference in access to teachings upcountry compared to the teachings in Nairobi. Similarly, women in the HIV-negative FGDs had misconceptions about family planning and its effect on production of breast milk.

Discussion

This study explored factors that influence EBF practices among a group of mothers in urban Kenya. Our findings demonstrate that women who desire to EBF their infant face complex barriers at different levels. Lack of a healthy diet and strong cultural norms were found to be major obstacles for women in all FGDs, which is consistent with previous literature⁶. There were a range of cultural feeding norms which reflect the diversity of the ethnic groups living in Nairobi. HIV-positive mothers who participated in FGDs after receiving the peer-counseling intervention appeared to feel more empowered to challenge cultural norms around infant feeding, compared to HIV-negative mothers and to HIV-positive mothers who had not yet received the intervention. Study participants in all FGDs reported that male partner involvement can be a facilitator or a barrier on their ability to EBF when desired, men who provide financial assistance, emotional support or share household duties allow women to EBF. In addition, women in the HIV-positive FGDs reported more frequently that they had partner support compared to women in HIV-negative FGDs. The influence of

family members and neighbors also played a crucial role in women's decision-making about infant feeding practices. This is consistent to what previous studies have reported⁶. Women felt disempowered when challenged by their family or neighbors on their decision to EBF, and this was particularly mentioned by HIV-negative women. We found that there was little awareness about the importance of EBF and inaccurate knowledge about health issues including HIV transmission, the effects of family planning methods on milk production and misconceptions about how to start introducing solids.

The most interesting finding was that women mentioned they were in charge of the infant feeding decision. Previous literature has reported that "infant decision-making by women living with HIV is constrained by a lack of autonomy, stigma and poverty"¹³. While these barriers were present during the discussions, when asked: "Who makes the decision on how the baby should be fed?" women most often asserted that the decision lay with the mother, regardless of HIV status; other times women reported the decision was shared with their partner or family members and at times they reported the decision should be made by the doctor. Our data show that the peer counseling intervention which some HIV-positive women received appeared to be helpful for women to increase their knowledge and awareness about EBF and increased their autonomy in decision making, by increasing their feeling of peer support for EBF and reinforcing knowledge that it was the best decision for their infant's health. This is the same support they need from their community and policies that promote, support and protect EBF, such as access to maternity leave.

We were surprised that HIV status appeared to be a facilitator for women to EBF, being HIV-positive gave them access to extensive health services including this intervention, where the intensive counseling empowered women in infant feeding decision-making. This is consistent with two studies in Kenya that reported that EBF is more common among HIV-positive mothers at six months, compared to HIV-negative women^{14,15}. Furthermore, our data suggest that HIV status might have a positive effect on partner relationship dynamics, as women in HIV-positive FGD would often mention they have a partner that supported their decision to EBF, and this might be a key factor that supports their decision to EBF. This highlights the need to have a more supportive clinic environment for all pregnant and breastfeeding mothers

who intend to EBF regardless of their HIV status, as well as a more inclusive environment for their male partners.

Strengths and limitations

This study provides rich information regarding the myriad of factors that influence EBF among HIV-positive women. The FGDs consisted of women from over nine different ethnic groups which allowed us to receive multiple cultural perspectives that influence women's infant feeding practices in this community. However, this qualitative study was conducted in low-income neighborhoods in urban areas of Nairobi and may not be generalizable to rural Kenyan women or women in of higher family income. As is the nature with FGDs, participants with specific or embarrassing barriers to EBF may not have felt comfortable revealing these in a group setting. In contrast to the general community, all HIV-positive women who participated in the FGDs were comfortable revealing their HIV status in a group setting. Women with higher levels of HIV stigma, and/or women who have not disclosed their HIV status, might have different attitudes toward and experiences with EBF. Women whose infants did not survive the perinatal period were less likely to participate in this research and may have had different attitudes to infant feeding.

Conclusion

We found that women find it difficult to adhere to EBF recommendations, although those who received intensive counseling appeared to have stronger opinions about infant feeding. Barriers to EBF exist at personal, community and societal levels. A peer counseling intervention for HIV-positive women appeared to increase women's sense of autonomy in infant feeding decision-making and created a supportive environment amongst women. However, there is a need to increase awareness about the benefits of EBF for all mothers regardless of their HIV status, and to address barriers to EBF amongst women's partners, family and community members, and to create workplace policies that that support breastfeeding women.

VIII. **References:** Provide citations to key literature references used in the proposal.

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