

Between proscription and control of breastfeeding: women's strategies regarding prevention of HIV transmission in West Africa

Alice Desclaux, Chiara Alfieri

▶ To cite this version:

Alice Desclaux, Chiara Alfieri. Between proscription and control of breastfeeding: women's strategies regarding prevention of HIV transmission in West Africa. Cassidy T., El Tom A. Ethnographies of breastfeeding. Cultural contexts and confrontations, Bloomsbury, 2014. ird-01297267

HAL Id: ird-01297267 https://ird.hal.science/ird-01297267

Submitted on 3 Apr 2016

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Between proscription and control of breastfeeding: women's strategies regarding prevention of HIV transmission in West Africa

Alice Desclaux and Chiara Alfieri Alice.desclaux@ird.fr

Version d'auteur

Parution après corrections in : Ethnographies of breastfeeding. Cultural contexts and confrontations, Cassidy T., El Tom A. (dir), Bloomsbury, 2014, pp. 125-144

Summary

With epidemiological evidence indicating that breastfeeding transmits HIV to more than one-third of infants of HIV-positive mothers in Africa, WHO recommendations have advised that women make a choice between preventive options, i.e. early weaning after exclusive breastfeeding, or formula feeding as in developed countries. Based on field data collected in Burkina Faso and Senegal, this paper will examine how the notions of choice/incapacity have been interpretated by women. Case studies will be presented about women's experiences and the feeding patterns they applied that show how the social and medical context shape decisions and practices. These results reveal how some women build lay preventive strategies, unexpected by health professionals that permit them to face dilemma when neither breastfeeding nor "safe" formula feeding is possible.

Introduction

When the first data about cases of HIV transmission through breastfeeding were published in 1985 (Ziegler, 1985; OMS/WHO, 1987; Dunn, 1992), the eviction of breastfeeding was rapidly adopted as a medical recommendation for women living with HIV in developed countries. They were summoned to formula feed their infants, and formula would be provided to them through social insurance systems or social programs. The number of infants born from HIV-positive women was known as limited and formula feeding appeared as an easy strategy, already available, known to be acceptable, quite efficient since it would fully eliminate the risk of HIV transmission.

In developing countries, the history of prevention of HIV transmission through breastfeeding was more complex. There, a number of factors hindered the scaling-up of the eviction of breastfeeding as a preventive strategy regarding HIV risk. The main ones were the risks related to formula feeding in settings where the sanitation level is low and drinking or potable water is scarce, where access to fuel or electricity for heating and refrigerating formula based milk is not general, where literacy rates amongst women are limited, and where the epidemiological environment makes diarrhea common and malnutrition a leading cause of infant mortality. Also, a number of scientists under-estimated the impact of the AIDS epidemic at a time when it had not reached its peak in all African sub-regions, and doubted about the necessity to set up specific policies (Jelliffe and Jelliffe, 1988:142).

When formula feeding was considered in developed countries as the only means to avoid HIV risk, it was understood in developing settings as an "option" with various infectious and nutritional attached risks. Its feasibility, accessibility and acceptability, were not guaranteed and proscription of breastfeeding was to be considered amongst other feeding options, with an aim of balancing and reducing a whole bunch of risks –rather than only eliminating the HIV one.

From 1998, WHO and other United-Nations agencies set up policies for the reduction of HIV transmission through breastfeeding based on the selection of low risk feeding options defined in

relation with the sanitary environment (ONUSIDA, et al,1997). Between 2000 et 2009, in many developing countries the main preventive feeding options promoted at national level were two-fold: on one hand proscription of breastfeeding and use of formula; on the other hand control of breastfeeding through the limitation of its duration to 3 to 6 months and through its exclusiveness, since some publications had shown that mixed feeding might increase the rate of HIV transmission through breastmilk (WHO/UNICEF/UNAIDS, 2003). This general policy slightly changed when antiretrovirals provided to the mother and to the infant showed their efficacy for "preventive coverage" of breastmilk; in 2009, WHO recommended to choose only one feeding option as a strategy at national level (WHO, 2009). Then, when developed countries still recommended formula feeding combined with antiretrovirals to eradicate HIV risk, developing countries mostly opted for breastfeeding "protected" by antiretrovirals. In 2010, the divide observed during the early period of the HIV epidemic is back: different preventive strategies are promoted in developed and in developing countries. However, owing to the efficacy of antiretrovirals, the "virtual elimination" of mother-to-child HIV transmission is expected for 2015 (UNICEF/UNAIDS/WHO/UNFPA/UNAIDS, 2010).

During nearly 10 years, some West African countries implemented national programs for the Prevention of Mother-to-Child Transmission (PMTCT) that permitted HIV-positive women to decrease or eliminate HIV risk of transmission and avoid extra infectious and nutritional risks by providing them information, counseling, guidance and support for prevention, as well as formula under certain conditions. Besides its content of human experience and suffering, the "2000-2009 window" is an interesting period from a social science point of view, since international policies giving similar recommendations for all world countries allowed comparative studies of local interpretations for the same preventive propositions and their effects.

The issue is important for public health. When international organizations started providing estimations, in 2000, the figures of 200 000 to 500 000 infants infected annually by HIV through mother to child transmission were mentioned; breastfeeding would be responsible for 1/3 to ½ of these transmissions (WHO/UNICEF/UNFPA/UNAIDS, 2003). In 2009, more than 1,3 million HIV-positive women were pregnant in Sub-Saharan Africa. About 700 000 were involved in PMTCT programs and received antiretroviral treatment (WHO, et al., 2010); they had to face the issue of infant feeding. In spite of the achievements of PMTCT programs, the estimated number of children newly infected by HIV was 330 000 (190 000-460 000) in this region (when less than 100 children were concerned in Western Europe). About 1/3 are supposed to have been infected through breastfeeding. 90% of all HIV-positive children in the world live in Sub-Saharan Africa (as well as 80% of all HIV-positive women). These differences in scale of concerned populations between developed and developing countries –particularly Sub-Saharan Africa-, make it relevant to draw an in-depth analysis of attitudes when breastfeeding is loaded with risk.

Have women who participated in PMTCT programs in West African countries widely applied proscription of breastfeeding, as in developed settings? Why did some women use other feeding options? Were these experiences determined by the material and environmental context? Or were they more influenced by the social and cultural context regarding infant feeding?

From a larger perspective, what do HIV-positive women's practices and experiences reveal about breastfeeding in contemporary West Africa? Do they show changes in perceptions due to the AIDS epidemic, as it has been discussed elsewhere (Liamputtong, 2010)? Do these experiences reveal some trends related to local issues or do HIV-positive women living in West Africa share more general concerns with women who also must withdraw breastfeeding in other regions?

Burkina Faso is a country where such issues may be studied fruitfully, as its situation gathers several characteristics common to many West African countries. With a Gross National Income per Capita of 460 USD (UNICEF, 2007), it is considered as a "Least Advanced Country". Its 13 million inhabitants mainly live from agriculture in rural areas, while undergoing a growing attraction towards Ouagadougou, the capital city (1 million inhabitants) and Bobo-Dioulasso, the second main city (400 000 inhabitants).

The HIV epidemic is "generalised" according to WHO definition, which means that more than 1% of the adult population of Burkina Faso is HIV-positive and all social groups and geographical areas are concerned. The peak of the epidemic occurred in the late 1990s, reaching about 8%; the prevalence rate slowly decreased to 1.2% in 2009 amongst general population aged 15 to 49 (UNAIDS, 2010); the estimated number of persons living with HIV is 130 000. In 2011, the country may be considered as having been strongly affected by the HIV pandemic, and the majority of families have suffered from the loss of members. About 30000 persons take antiretroviral medications, which requested huge improvements in the health system organization and efficiency. With the involvement of many local social organizations from all sectors (from "civil society" to public services) and the financial support of the Global Fund for AIDS, Tuberculosis and Malaria (GFATM), the public health situation is in a phase of "normalization": HIV infection is more and more considered as a chronic ailment and prevention has been scaled-up beyond health services all over the country.

From a social and cultural point of view, AIDS has not become a "commonplace disease". The moral content that was related to HIV contamination during the first decade, owing to perceptions of the infection as due to extra-marital sexual relationships and sex workers, and the load of misfortune attached to a deadly disease have not faded away. Though antiretroviral treatments are successful in providing health to many adults and children, stigma is still attached to HIV infection, and people avoid any action or discourse in public spaces that might evoke a connection to HIV.

Method

Between 2003 and 2007 we conducted a research program on social and cultural aspects of prevention of HIV transmission in Burkina Faso, in a comparative approach with four other resource-poor countries (Cameroon, Cambodia, Kenya, Ivory Coast). Enquiries used the ethnographic method combining non structured data collection by immersion in health services and associations supporting people living with HIV, 84 structured interviews with 45 HIV-positive mothers (with infants aged between 1 and 3 months, then again between 6 and 9 months), interviews with 7 health and social workers or NGOs members, focus group discussions with the same populations, 1-month observation and recording of individual and collective counseling sessions. Data collection was implemented in Ouagadougou and Bobo-Dioulasso in public health services applying national program. In some of them PMTCT program was supported by a NGO, an association or a clinical trial while others only could provide the average national standard of care. Data collection was done by Chiara Alfieri, with the help of a translator for interviews, and by a team of research assistants for the recording of some counseling sessions. Interviews were recorded, translated from Mooré, Dioula and Fulfuldé to French when necessary, and transcriptions were processed using Word for textual analysis. The analysis was based on the explicitation of emic categories and social and cultural logics, not on a normative approach that would identify compliance or resistance to medical recommendations. The results were compared to the results of a former research held about infant feeding perceptions, stakeholders and practices in Burkina Faso and Ivory Coast before the AIDS epidemic, in 1998-1999 (Desclaux and

Taverne, 2000). This enabled us to identify the main trends in perceptions and practices, the changes over a 5 to 8 year time span, and variations between pilot sites hosting PMTCT programs held with external support and "ordinary" sites from the national program. It also enabled us to identify common situations across countries and local cultural particularities regarding counseling for the selection of infant feeding mode and mother choice (Desclaux and Alfieri, 2009), interactions between mothers and health-workers (Desclaux, et al., 2006), the dynamics of social constraints (Desclaux and Alfieri, 2008), and the way mothers deal with contradictory influences and discourses regarding preventive strategies (Desclaux and Alfieri, 2010). This article will focus on women's feeding practices to identify patterns, and will analyze the social logics underlying women's strategies.

Case studies: four women, four infant feeding practices

The situations observed amongst burkinabè women mostly followed four patterns. These women applied: (a) proscription of breastfeeding, replaced by formula feeding; (b) control of breastfeeding through exclusive breastfeeding limited to a duration inferior to six months; (c) limited control over infant feeding completed by lay preventive practices; (d) successive control and proscription through "sequential feeding". Four case studies will allow understanding women's experiences and situations as well as the logics underlying these practices.

a) Fatou: Proscription of breastfeeding

Fatou is 35 and her infant is 45 days old when we meet her for the first interview. She is married to a polygamous man who works either as a traveling salesman or as a peasant; they have 4 children. They live in an extended household belonging to her husband's mother; she has a co-spouse who lives in the same household. Fatou is a hairdresser (doing braids) and when she can work, she earns about 300 FCFA a day (0.6 USD), which allows her to prepare food for her family. She has completed primary school. She is a protestant.

When she and her co-spouse were ill three years before, she got tested and she and her last child were diagnosed HIV-positive, but her husband and her co-spouse refused to take an HIV test. She did not tell him her HIV status but she thinks he knows it. As she was still breastfeeding her 13-month-old child when she got her test result, she weaned him immediately. She was encouraged by the doctor and healthworkers team who provide follow-up care for persons living with HIV in a health center supported by an international non-governmental organization. They provided her formula. As her baby was already grown up, it was not very difficult to give him formula, though she needed an excuse for this "early" (according to local standards) weaning:

"I looked for a way to say it, and I said that as I was ill myself, strenghtless, with little blood, and the doctors allowed me to wean my infant and said I will have more strength for myself. They [family and neighbours] would not try to look further on the subject, they did not think it might be THE disease.

Then, she started ART (Anti Retroviral Therapy) and she regained enough weight to feel much better: her weight was 65 kg after decreasing from 72 to 47 kg when she was ill. At that time her husband requested her to come back to their household though he had previously told her to return to live with her own family when she was ill. Then she had a new pregnancy.

Q: Then, what led you to choose formula?

A: As I already knew that breastmilk is poison, I did not feel like breastfeeding my baby. I also knew that if I chose formula I would not have to pay for it. That's why I said I will formula feed this baby to prevent him from getting ill as the previous one.

Q: What did your co-spouse say?

A: She asked why [I did not breastfeed him] and I said it is because of ulcers I was requested to avoid breastfeeding.

Q: And what did your parents say about formula?

A: Ah, they often say I should also breastfeed him to make him fat, because 'the whiteman's milk' (formula) cannot make him fat quickly. Then I say that usually when I have a baby I do not have much milk, then as they [the health team] help me [by providing formula] I am not going to look for something else".

Ouagadougou, 2006

In Burkina Faso, nearly all women breastfeed their infant, as did Fatou when she was diagnosed HIV-positive: 85% of infants are still breastfed at the age of 20 to 23 months (UNICEF, 2007). Using formula is uncommon out of PMTCT program, if not for women who work in the formal sector since the legal duration of vacancy after giving birth is limited to two months and women seldom may bring their child with them on their workplace. These women using formula belong to a minority, usually living in urban area and more well-off that the general population since 27.2% of the inhabitants live on less than 1 USD a day and 71.8 less than 2 USD (PNUD, 2007): most of them cannot meet the cost of formula. In semi-urban and rural areas, most women are seen with an infant on their back, as the fertility rate is 6.5, which means that on the average they spend more than 18 years in their lifespan being pregnant or close to their infants. These infants held on their mother's back in daytime may be breastfed on demand until they can walk, and usually are breastfed long after they get teeth.

However the majority of women we interviewed who said they had chosen their infant's feeding option —between proscription and control- selected formula feeding, as Fatou did. All these women said that they prefered it because it totally avoids HIV risk. Though formula feeding holds different infectious and nutritional risks that have been explained to women during antenatal counseling, those are seldom considered as important besides HIV transmission, a risk that no mother tolerates. Nearly all women mention that if they could choose without constraints they would choose formula, i.e. zero risk of HIV transmission.

Most women who were able to make a choice accessed PMTCT program in a health service supported by a "project" –either a research project held by an international institution or a support project held by a non-governmental international organization. As these "projects" would reinforce teams, material means and professionals' skills in health services, these women were able to get counseling for infant feeding in the context of HIV during antenatal and postnatal visits, to get nutritional support through follow-up postnatal care and provision of formula –sometimes along with ustensils for the preparation of formula. Projects allowing women with limited means to access formula makes visible these women's capacity to manage formula in environments of scarcity – even, in some cases, when there is no tap water nor electricity in the house.

Some women might also choose formula in "ordinary" mother and child services, if they lived in a social context or had a professional activity that permit them to meet extra expenses. All women considered seriously the social risk of being stigmatized as a "bad mother" because they were using formula, but they were able to set up strategies to overcome that risk. In "project sites" or in

"ordinary" services, the women that formula-fed their infants often have a social profile, a higher education level, a position in the household or an age that allows them some autonomy: Fatou, for instance, is 35 and already had 4 children —which protects her from critics about her ability to care for a child-, and knows how to deal with gossips. As she said:

"If my neighbours ask about it, I say that I have not enough milk, and as I am getting support [i.e. I am provided formula] I have no need to look further when I already get help. I say it like this, briefly.» [in order to avoid further questions]

In Fatou's case, the fact that she already had a successful experience with breastfeeding proscription and use of formula made it easier to choose this feeding mode. Moreover, she had stopped breastfeeding her previous child very late according to international standards —if not to local ones- when milk was only a part of his daily intake. As this child had started eating diverse food, his health was not affected by the change and Fatou would not consider that any intercurrent disease be due to the interruption of breastfeeding, which might have an impact on her perceptions.

As the "tree" of economic barrier is solved by support organizations or projects, the "forest" of other determinants of feeding strategies come foreword. Fatou's case makes appearent the main factors that lead women to choose proscription of breastfeeding: a strong will to avoid any HIV risk for their infant, some autonomy towards "significant others" such as the head of the household or its influent members —usually their husband, mother-in-law or co-spouses-, the capacity to face and avoid criticism, a previous experience of early weaning or formula feeding.

b) Rokia: Control over breastfeeding

Rokia is 27, has been living in Bobo-Dioulasso for two years when we meet her. She was born in Mopti, Mali, where she was maried at the age of 13 as the fourth wive of an islamic priest and had two children. Her husband migrated to Côte d'Ivoire and left her without resources. Then she went to Bobo-Dioulasso and she married a man who said he is an ambulant salesman. When we met her, she lived with her husband, a 10 years girl from her first marriage, and the baby. She has a co-spouse that lives in another neighbourhood. Her husband's goods were recently confiscated by the police and since then, the family has no more resources. She says that "eating is a problem" since they do not have enough money and they survive on the food that their neighbours give them. However they have an access to tap water.

Rokia was diagnosed HIV-positive during her last pregnancy in Bobo-Dioulasso because she was ill and antiretroviral treatment was prescribed to her for PMTCT. Her husband discovered the medicines, went to his doctor to get an explanation about it and had a fight with her back home. Rokia mainly relies on help by a community-based organization: she is given some food and medicines; she also attends community meals organised there. But she doesn't like to go there because she doesn't want to be seen by her neighbour who works there. She explains her infant feeding choice as follows:

"I chose to breastfeed him because nowadays if you do not breastfeed people think that you have THE disease. I thought that if I start with formula they will have their idea. But I breastfed him and he was not confortable. After 26 days he was complaining about his belly and he got a bad diarrhea.

Q: And why do you think he had diarrhea?

A: Because the disease is in my body. Thus as my infant drinks from my breast he may get the disease. Then I thought I should stop breastfeeding him.

Q: You thought he was getting the disease?

A: Yes, that's why he had diarrhea. [...]

Q: And what did you do to avoid people being suspicious?

A: The way I did it [they wouldn't]. First the baby had diarrhea. Then when they started asking why I was stopping breastfeeding I said that my right breast hurts and the milk from left breast is not sufficient. And also my breast was swollen, they would not understand [that she turned to formula was to prevent HIV: they would think she was using it because of her swollen breast]."

Rokia applied a transition feeding mode during four days, as advised by a social worker. This time span was necessary to get ustensils to prepare formula, meet the doctor and "get his authorization", learn how to prepare formula with the social worker and to have a home visit by the PMTCT counseller. During that time she put ice on her breast to stop lactation. People stopped enquiring then. Rokia gives long and detailed explanations about the way she prepares formula milk.

When asked about her baby's health, Rokia answers he is well, owing to formula and herbal teas. But before, she had to "fight" to avoid extra water: because the baby was crying from his first day of life, her neighbours and other women —specially one who works at a pharmacist's- told her the baby was thirsty and wanted to give him water.

According to Rokia, the disease is conveyed not through milk but through blood only. She thinks that breastfeeding manner is thus more important than breastmilk eviction. Rokia can tell about some positions for breastfeeding that have been taught to her during information sessions in antenatal visits, which are necessary to avoid sores on the nipples leading to blood sucking by the baby. She explains that she avoids bringing milk to the baby's mouth though pressure on the breast in order to avoid blood emission, and that mastitis may have the same consequences.

Rokia tells about the importance of support which she finds in community based organizations and in the project that reinforces the Mother-and-Child Health service she attends.

"My heart cried from anxiety but owing to counseling and medicines, they give us advices, they encourage us, they give us money for transportation, even more, and if you feel weak they come to your home to support you, to help solve your problems and anguish. I really found peace there. It is like if God knew what I was feeling. I was sitting thinking that I had no more milk. That day if he (my baby) drunk milk there would be no more left for the day, then I would have to go get some more. And I had no more money for transportation."

Rokia's story —and particularly the time span when she was breastfeeding her infant- shows that she was able to "control" breastfeeding, which contributed in permitting her infant to stay HIV-negative. However, unlike expectations by some Burkinabè health professionals who say that breastfeeding being "natural", exclusive breastfeeding should not be too difficult (Desclaux and Taverne, 2000), applying breastfeeding when exclusive and ended by an early weaning requests many precautions with social consequences.

In Burkina Faso, besides long breastfeeding duration mentioned above, only 7% of infants under 6 months are breastfed exclusively; 50% are breastfed and receive complementary food when 6 to 9

months old (UNICEF, 2007). Exclusive breastfeeding is thus uncommon, as breastmilk is complemented by liquids. It is also rather uneasy since local culture of infant feeding tends to add water in many contexts: during the first days to replace colostrum which is thrown away as unclean; to pacify a crying baby when the mother is not available for breastfeeding; when the weather is hot and dry, or the baby must stay out of shade and may be thirsty; when the baby's body is "hot" —which, according to emic perceptions, means that he has got fever or that he has been exposed to symbolic heat in sites where some rituals were performed or through a contact with a body heated by strong emotions (including sexual relationships). Moreover water is also given to a baby without hydratation purpose: as a welcome gift ("eau de bienvenue"), water is usually offered to a woman coming for a visit in a household, and some water is also given to the baby. One more purpose for provision of water by somebody besides the mother is hygiene and infant care. Infant cleaning requires that the baby is given a daily bath, with an enema in the first days of life using water in which some herbs were soaked. The techniques of bathing include gesture to force the infant to drink some water used for the bath, which helps cleaning the guts and is considered as a preventive practice.

During the last ten years, the national program for promotion of breastfeeding and the UNICEF program "Baby-friendly hospitals" held in pediatric wards spread messages in favor of exclusive breastfeeding for all mothers in Mother and Child Health services and on the media. These campaigns helped reducing the feature of exceptionalism linked to this practice. Contrary to HIV/AIDS prevention information messages that aimed at popularizing the notion that breastfeeding may transmit HIV, these recent messages were useful for avoiding the attachment of HIV-related stigmatization to exclusive breastfeeding. However, the risk that suspicion about HIV infection be attached to the practice of exclusive breastfeeding or formula feeding, as about any uncommon feeding mode, is still meaningful and feared by HIV-positive mothers.

Since giving water to an infant is so common, applying exclusiveness of breastfeeding requires that a mother avoids social contacts with her infant. Some women say that they do not want anymore to attend meetings and ceremonials such as baptisms where they know they will find other women who may give water to their infant; they also may go there before or after the main moment of affluence to meet less people. In their household, they do not leave the infant under supervision by an elder child or by a young cousin girl or housemaid, which is common for other infants.

The narrative of Rokia's management of weaning shows not only the set up of a new feeding technique, but also her efforts to control its interpretations by significant others, or for any person in position of enquiring or giving comments about her feeding practices. Through exposing a partly fictive etiology that cannot be easily checked by somebody else (pain in the right breast and insufficient milk in the left one) and relying on a visible symptom, she builds a "cover" medical explanation, consistent according to lay perceptions of breast ailments, as an excuse for applying early weaning.

Rokia's case illustrates the many dimensions of control that HIV-positive women apply to breastfeeding in order to reduce the risk of HIV transmission while maintaining their role of caring mothers. They control: (1) the technics of breastfeeding, including gesture, position and time of feeding; (2) the provision of any other feeding to the infant including water; (3) their participation to social activities outside the household to avoid complementary feedings; (4) the sharing of childrearing role in the household; (5) the time and duration of weaning to reduce it as much as possible; (6) their comments on infant health to avoid raising suspicion and defuse any comment that might bring to a breach in confidentiality about their HIV status; (7) their anxiety to transmit

HIV to their infant while feeding him, a psychological burden mainly relieved through support by community-based organizations.

c) Leila: infant feeding out of control

Leila is 26 years old when we meet her with her child, a 2 years old boy. She lives with her mother and her six brothers and sisters, but without the child's father who abandoned her when he knew she was pregnant. She has an exceptionnally high education level since she obtained a university degree in international trade. However she has no work position and depends on the household head for her resources; she prepares and sells cakes as an informal part time job but earns little money this way.

Leila got an HIV test after she suffered from a zona. She says that she has no idea about the way she was infected. She told her HIV status to her mother who reacted badly, reproaching her since then to spend too much money on treatment for her and her child and refusing to give her any for this purpose. She is not pleased about Leila's informal activity.

When she was counseled about infant feeding, Leila prefered to breastfeed her child. When he was 3 months old, she started giving him some gruel since she wanted to wean him at 4 months. But her mother did not want so, and she went to see a cousin gynecologist who was not informed about her HIV status to ask him to tell Leila that she should go on breastfeeding her baby. As for exclusiveness of breastfeeding, Leila could not practice it since her mother told her:

"We [me and my generation] have given you water when you were born. I gave water to you and you grew up healthy. Everybody needs water to live, so does a baby."

She started giving other food besides breastmilk when her son was three months old and finally weaned him when he was 14 months oldⁱⁱ. Unfortunately he was infected by HIV. Since he was an infant, Leila also uses folk remedies that were taught to her by "les vieilles"ⁱⁱⁱ, elder women of her mother's generation.

"You give them a canari¹ and a vieille puts some leaves in it, I don't know which ones. These leaves do well against HIV and pain due to teething. An old traditional healer and a vieille ask about the color and consistance of the stools, about vomiting and spitting, or fever at night, to select the right leaves. As long as the leaves look good the medicine is OK. You may buy some for 200 FCFA or 100 FCFA (0,4 or 0,2 USD).

I give this medicine continuously, and when I don't have money the old woman gives it free. Even in the hospital we put that in a bottle and I gave it as water. The doctors do not approve it, but mothers think that doctors and traditional healers may collaborate together for people's sake."

Seeing her education level, one would expect that Leila, with a good knowledge background, applies the preventive measures advised by health services. However she mostly adopted the lay child feeding and care mode that are usual locally for infants who are not exposed to HIV. Her infant was breastfed during 14 months and was given water and early complementary feedings. Some herbal teas were used for prevention and care, their traditional indications for pediatric ailments being extended to HIV infection. Leila combined traditional and biomedical treatments, which is common amongst the mothers we interviewed.

-

¹ A terracotta pot used as a container for liquids

These feeding practices were decided by Leila's mother in respect for the usual distribution of roles in families. Elder women ("les vieilles") play an important role in childcare and rearing in the household, in particular for a mother's first offspring. Usually, in most ethnic groups in Burkina Faso, women live in their husband's extended family household -when the household is not nuclear- and childcare practices are governed by the father's mother. When the mother does not live with the child's father, as in Leila case, her own mother holds the power to make such decisions —or drive her daughter's ones.

Leila received some information from a community based association, but this was not before she had to take a decision about infant feeding options. Though this interview collected little personal feelings, Leila's words on feeding, care and HIV topics suggest that she was informed on risk and prevention but her absence of control over the feeding mode adopted for her infant results from a lack of autonomy in the household, lack of acknowledgement by her mother and lack of early support by a community-based organization.

Leila's case illustrates failures in applying prevention of HIV transmission either by proscription or by control of breastfeeding, mainly due to social reasons. Though she knows about preventive feeding patterns she cannot apply them for lack of autonomy and social legitimacy in front of her mother, who has the cumulative authority of a "vieille" and of the household's head. Leila's story shows the microsocial dimension of practices, which goes beyond the relationship between mother and child, the social frame usually considered in biomedical culture and services. To be implemented, unusual practices of proscription or control of breastfeeding must also have a social substratum, such as approval by a supportive household, follow-up and support by a community-based organization, regular care by a health team or regular exchanges in a self-help group.

d) Madina: Sequential control and proscription

Madina is 26 and her baby is 44 days old at the time of the first interview. She lives with her husband, a bus driver, in Ouagadougou. She is his only wife in the household, but he also has another partner with a 6-year child, living somewhere else. She is protestant. She never went to school and cannot read. Madina has a 6-year child, and the infant who is the subject of the interview reported here. She had another child who died when 7 months old, two years before this interview. In their household, also live two younger brothers of her husband who is the head of the family, and the wife and small child of one of them. Madina mostly looks after the household and prepares food, with the very limited amount of money that her husband gives her (about 500 FCFA = 1 USD per day for 14 people). Sometimes she sells small goods.

Madina discovered her HIV status during her last pregnancy. Only her husband knows her HIV status but he refused to undergo a test himself and never spoke to her about his status. She sometimes gets some help or support from her husband's brother's wife, but the support she really appreciates comes from associative members from a support community based organization who visit her. She also goes to the organization center when she feels the need to be encouraged.

As she had an abcess when breastfeeding the infant who died, two years before, she did not want to breastfeed her next infant.

"I was shown how to care for my infant after delivery. I was asked wether I was going to breastfeed him or to use fomula. I said I was going to formula feed him, but my husband did not want me to do so, because his mother was going to come from the village. And if

she found that the baby was formula fed she was certainly going to make troubles. Thus my husband told me to breastfeed him and later we would formula feed him " ...

"I wanted to do so [to mention her previous abcess as a reason to avoid breastfeeding], but as the vieilles had not seen the sores I had before, they would say I must breastfeed. If I had said I had no milk they would also check."

When compelled to breastfeed, she fought to avoid extra feedings, specially water. At the time of delivery her mother-in-law was in their household; before Madina had milk, the woman wanted to give some tap water to the baby. Madina knew that giving water was wrong but she could not prevent it, thus she had bought some mineral water and the mother-in-law used that water. The infant had water on his first day, then he was breastfed.

During the second interview we could know more about the feeding history: at the medical center, they supported her decision to wean her baby very early and she was proposed an appointment for three months later, to be given formula. She went on breastfeeding the child until he was three and half months old, then formula fed him. The baby was growing well, but he died of allegated neurologic troubles when he was six months old.

Madina's case illustrates a strategy that was chosen by many women we interviewed. According to the biomedical categorization of infant feeding patterns for prevention of HIV mother-to-child transmission, it should be labelled as "exclusive and early weaning", as this categorization is focused on the first months of the baby's life and on the choice of an option, rather than on the feeding itinerary in the two and half-years time span of infant life when he may be breastfed. Though the medical categorization is based on an opposition between breastfeeding and formula feeding, the mothers who opt for breastfeeding use formula when weaning; in social context where prolonged breastfeeding is the main practice, this may be interpreted as temporary proscription of breastfeeding.

Unlike other mothers who started exclusive breastfeeding without planning the situation at weaning period, and had to face stigma, lack of food for their infant, or critics for not feeding properly, Madina planned this weaning, settling support from her husband, from the community-based organization team and the medical team from the health center.

Madina also had to face conflicting influences: for instance, the feeding mode she adopted first was not her choice. However for each meaningful event regarding her infant feeding, her interventions seem to be the result of a weighing —a "balance"- between social and biological risks: the social risk of being considered as a bad mother or as an opponent to the authority of the "vieilles", with the risk to be labelled as HIV-positive on one hand, and the biological risk of HIV transmission to her infant on the other hand. Her mode of dealing with risks follows a risk-reduction model —rather than a "zero risk" one. When she cannot avoid risk, she tries to limit its extension and reduce its consequences. Without any formal education, and with a social status that does not give her much autonomy, Madina applies a contextual rationality and negociates with all parts, which makes the succession of control and proscription of breastfeeding the most relevant strategy in her case.

Overall strategies and underlying logics

Amongst the rich information brought by the whole set of women's narratives, we will discuss three aspects, to answer initial questions.

The social substratum of preventive feeding practices

Unlike women in developed countries, the women we interviewed in Bobo-Dioulasso did not "apply a medical recommendation" regarding infant feeding, since they had to select between two options. It was not only a matter of "choice", since all of them said that they prefered formula feeding as the only method that fully eliminates the risk for HIV transmission. Beyond the economic treshold, their feeding decisions were the result of a matrix of tensions between contradictory perceptions of antagonistic risks and benefits regarding formula and breastfeeding, eventuality of social support and stigma, as well as diverse discourses or opportunities about feasibility.

Whatever the feeding option they selected, the women we met faced difficulties to apply it, since none of these feeding practices is common in the lay culture of infant feeding in the 2000s (Desclaux and Taverne, 2000). Either complete proscription of breastfeeding and other liquids, or reduction of breastfeeding duration, may be criticized by co-spouses, neighbours, friends and elder women, particularly the infant father's mother, in a patrilinear society where a woman remains a stranger with little rights in her husband's ligneage and where elder women are considered as experts in infant's care. Women are thus confronting a situation rather different from the one described by health professionals, who consider formula feeding as rarely possible, and breastfeeding as a "default option" easily feasible if the mother is convinced of its utility.

Besides, women's narratives show that both preventive feeding practices are possible if a mother has enough autonomy and gets social support —either by a husband, by significant others, a community-based organization, non-governmental organization, or a health team. Feeding practices are only secondarily determinated by their material and environmental context regarding water and hygiene. Contrary to the approach developed in health services, focused on access to tap water and electricity, perceptions on one hand and relational and social aspects on another hand seem to be at the forefront of facilitating factors or obstacles for applying control or proscription.

The perceptions of breastfeeding

The study of perceptions of breastfeeding and breastmilk shows their evolution during the last 20 years, due to biomedical communication on this subject that started before the set up of the national program for breastfeeding promotion and the rising of the HIV pandemic. When twenty years ago every classificatory mother might had regularly breastfed a baby, and a woman would easily feed a baby crying in absence of his mother, health professionals have told that an infant should be fed exclusively by his biological mother or by a surrogate. The benefits of breastfeeding are regularly taught during information sessions and notions of "bad milk" due to heat have slightly faded.

While building on overall highly positive representations of breastfeeding through erasing prior lay reluctance, medical discourse has also introduced the notion of HIV transmission; as a result, breastmilk is presently the object of ambivalent perceptions. The highly positive value attributed to breastmilk may explain to some extent the fact that, as Rokia, some women think that HIV transmission through breastfeeding is due to blood. This value may also be seen in the words of mothers of infants that were infected by HIV while undergoing the PMTCT program, who attributed transmission to mistakes in feeding from their part rather than to breastmilk as a vector of residual risk (Desclaux and Alfieri, 2008). The very particular discourse that presented exclusive breastfeeding as a preventive method when breastfeeding was considered as a mode of transmission might also have participated in the building of ambivalent perceptions. Amongst all

the women interviewed, few had positive perceptions of formula. The only quality mentioned was its completeness and scientifically fixed composition: for some women who do not have access to enough food for themselves, this feature makes formula more suitable than their own breastmilk.

Infant feeding practice and the intimate household history of HIV

Most women who opted for proscription of breastmilk took this feeding decision alone, informing their husband or not. When husbands are not concerned by payment of formula, they have less power on decisions; however the autonomy shown by some women on that matter is rather unusual. Fatou and Leila cases show, in very different ways, how women's personal autonomy regarding feeding decisions and practices is framed by the history of HIV in the household.

In Fatou's case, her husband was suspected for having transmitted HIV to her and her co-spouses, which weakened his symbolic capital and authority as the head of the household: in local gender values, a man is accountable for the prosperity and protection of his household members (Bila, 2011). Had she needed support, Fatou might have found it easily amongst health workers that would criticize him for having ignored possibilities of getting an HIV test earlier and protecting his spouses and children. Tacitly acknowledged as a "victim" of HIV transmission in her household, Fatou had enough legitimacy for acting as she wanted -following medical recommendations regarding her infant or taking decisions on other matters.

Unlike Fatou, Leila was not considered a victim in her household. Her pregnancy "without a father", then her HIV-infection, fully disqualified her in her mother's perceptions. As she broke her mother's expectations about a bright future following her university studies, she was no more seen as able to make an appropriate decision —either for earning a living or for caring for her child. Considered as "guilty" for her HIV-infection and social failure, she was compelled to apply her mother's decisions regarding infant feeding and care -which might have caused his HIV-infection.

Other women like Madina took their decision after discussing it in their couple, or, like Rokia, started a process of communication about HIV. Several histories show that the father may be himself aware of his HIV status and share with his wife a concern for the infant's health without always speaking explicitly about it: other fathers are supportive, as described in Côte d'Ivoire (Tijou, et al., 2009). In some cases, suspicion and resentment towards the infant's father seem also to have an incentive effect on women's affirmation of their own agency, as if they felt disengaged from their obligation of mutual support by their husband's prior defection towards protecting the couple from HIV.

Conclusion

The women living with HIV in Burkina Faso, who –for the majority of them- discovered their HIV status during their last pregnancy, could, in health services supported by international projects and community based organizations, choose between proscription and control of breastfeeding. When all of them prefered formula for its capacity to withdraw HIV transmission, their feeding decisions were the result of complex arbitrations resulting from the diverse discourses and social tensions usually constraining women –as on other matters in a patriarchal society.

More than applying medical recommandations, women would set up strategies built on lay understanding of risk reduction, that in some case were relevant from an epidemiological understanding though they were not fully acknowledged in medical discourse. As for sequential proscription and control, or for the use of bottled water when extra feedings cannot be avoided, these strategies may be considered as the result of an indigenization of WHO recommendations, that contributes to the building of a local lay knowledge in HIV prevention regarding children.

Women's experiences and discourses show that information about HIV did not, though feared by health experts, engender a loss of confidence in breastfeeding nor a "spill over" in the use of formula —which is not accessible to the general population for economic reasons. Rather than erasing the value of breastfeeding, the notion of HIV transmission seems to be associated —under an additive process- to overall perceptions which, following an increasing medicalization, tend to value breastfeeding and breastmilk more and more positively. In the end, HIV-positive women have a very ambivalent perception of breastfeeding, which makes infant feeding even more sensitive at psychological level, an aspect that has been also shown in East Africa (Blystad and Moland, 2009). This ambivalence of breastfeeding related to the polarization of discourses may endanger the communication about other risks that challenge breastfeeding, such as the toxical risks of nicotine or dioxines, which have an increasing importance in developing countries.

A particularity of the on-going social construction of the HIV pandemic is the moralities at stake. The categorization of women as "guilty" or as "victims" regarding HIV-infection, as a result of intimate stories of HIV transmission in the microsocial context of households, determines women's agency, including their ability to apply preventive infant feeding patterns. This study shows that the social and cultural dimension that shape decisions of proscription or control of breastfeeding and women's practices in Burkina Faso have a complexity underscored when only economical and environmental explanations are given for differences in practices between developed and least advanced countries.

References

Bila BM, 2011. Genre et médicament dans le contexte du sida au Burkina Faso. PhD in anthropology, University Paul Cézanne of Aix-Marseille, Jan 28, 2011

Blystad, A., Moland K.A. 2009. Technologies of hope? Motherhood, HIV and infant feeding in eastern Africa. Anthropology and Medicine. 16(2), 105-118.

Desclaux A., Alfieri C. In press, L'annonce du statut VIH de l'enfant: expériences des mères et interprétations des soignants au Burkina Faso. Hardon A., Desclaux A., Lugala J. (eds), Disclosure in the times of ART: Why, when, how and to whom? Special Issue SAHARA (Social Aspects of AIDS Research in Africa)

Africa)

_______. 2010. Facing competing cultures of breastfeeding: the experience of HIV-positive women in Burkina Faso. In: Liamputtong, P. (Ed.) Infant feeding practices: A cross-cultural perspective. Springer: New York, 195-210.

_______. 2009. Counseling and choosing between infant-feeding options: Overall limits and local interpretations by health care providers and women living with HIV in resource-poor countries (Burkina Faso, Cambodia, Cameroon), Social Science and Medicine, 69(6), 821-829

______. 2008. Allaitement, VIH et prévention au Burkina Faso. Les déterminants sociaux ont-ils changé ? Science et Technique, Série Sciences de la santé, Hors série n°1, novembre 2008 : Sida, santé publique et sciences sociales. Vingt ans d'épidémie et de recherche au Burkina Faso, pp. 117-126

Desclaux A., Crochet S., Querre M., Alfieri C. 2006. Le " choix informé " des femmes séropositives qui doivent alimenter leur enfant : interprétations locales, limites et nouvelles questions. in Desgrées du Lou A., Ferry B. (eds), Sexualité et procréation confrontées au Sida dans les pays du Sud. Paris, CEPED : 245-262

Desclaux, A., & Taverne, B. (eds). 2000. Allaitement et VIH en Afrique de l'ouest. De l'anthropologie à la

Jelliffe, D.B. and Jelliffe, E.F. 1988. HIV and breastmilk: non-proven alarmism. J Trop Pediatr 34, pp. 142–142.

Liamputtong P (ed), 2010. Infant feeding beliefs and practices across cultures. New York: Springer.

ONUSIDA, UNICEF et OMS. VIH et alimentation du nourrisson. Une déclaration politique de l'ONUSIDA,

l'OMS et l'UNICEF, 1997. (http://www.unaids.org/publications/documents/mtct/infantpolf.html). Genève,

santé publique. Paris: Karthala. Available from: http://www.documentation.ird.fr/hor/fdi:010024735

ONUSIDA.

PNUD (Édité pour le Programme des Nations Unies pour le développement). 2007. Rapport mondial sur le développement humain 2007/2008. New York : PNUD, Paris : La Découverte. (available at http://hdr.undp.org/en/reports/global/hdr2007-2008/chapters/french/)

Tijou Traoré, A., Querre, M., Brou, H., Becquet, R., Leroy, V., Desclaux, A., Desgrées Du Loû, A. 2009. Roles regarding infant feeding within HIV+ couples. Social Science and Medicine. 69(6):830–837.

UNAIDS. 2010. Country profile, Burkina Faso.

http://www.unaids.org/en/CountryResponses/Countries/burkina faso.asp (Accessed Dec 1, 2010))

UNAIDS. 1997. HIV and infant feeding. A policy statement developed collaboratively by UNAIDS, UNICEF and WHO. (read in the original French and was available at

http://www.unaids.org/publications/documents/mtct/infantpole(f).html).

UNICEF. 2007. The state of the world's children 2008. Child survival. New York: UNICEF (Accessed November 28, 2008, at http://www.unicef.org/publications/index_42623.html)

UNICEF/UNAIDS/WHO/UNFPA/UNESCO. 2010. Children and AIDS: Fifth Stocktaking Report. Geneva.

WHO. 2009. HIV and infant feeding. Revised principles and recommendations. Rapid advice. Geneva. http://whqlibdoc.who.int/publications/2009/9789241598873_eng.pdf

WHO/UNICEF/UNFPA/UNAIDS. 2003. HIV and infant feeding: Guidelines for decision makers. Geneva, WHO (revised).

WHO, UNAIDS, & UNICEF. 2010. Towards universal access: Scaling up priority HIV/AIDS interventions in the health sector. Progress report 2010.

http://www.who.int/hiv/pub/2010progressreport/report/en/index.html (Accessed Dec 1, 2010)

Endnotes

_

Research program ANRS 1271, held by CReCSS (Centre de Recherche Cultures, Santé, Sociétés, JE 2424) Université Paul Cézanne d'Aix-Marseille and funded by Agence Nationale (française) de Recherche sur le Sida et les hépatites virales.

ⁱⁱ The infant was exposed during 14 months to non-exclusive breastfeeding, when his mother was highly immunodepressed, a situation with a very high risk of HIV transmission.

[&]quot; « Old women »: a respectful term used to in French speaking African countries to name old women with reference to the knowledge they hold, specially regarding care, that they apply in their household or as a more or less specialized activity.

^{iv} This may include barks, roots, or various parts of vegetal species usually sold and kept dry and used as herbal teas.