

Syracuse University

SURFACE

Anthropology - Faculty Publications

Maxwell School of Citizenship and Public
Affairs

2011

Breast or bottle? HIV-positive women's responses to global health policy on infant feeding in India

Cecilia Van Hollen
Syracuse University

Follow this and additional works at: <https://surface.syr.edu/ant>

 Part of the [Anthropology Commons](#)

Recommended Citation

Van Hollen, C. (2011). Breast or bottle? HIV-positive women's responses to global health policy on infant feeding in India. *Medical Anthropology Quarterly*, 25(4), 499-518.

This Manuscript is brought to you for free and open access by the Maxwell School of Citizenship and Public Affairs at SURFACE. It has been accepted for inclusion in Anthropology - Faculty Publications by an authorized administrator of SURFACE. For more information, please contact surface@syr.edu.

Breast or Bottle? HIV-Positive Women's Responses to Global Health Policy on Infant Feeding in India

Cecilia Van Hollen, Syracuse University

This article describes how local responses to global health initiatives on infant feeding for HIV-positive mothers reflect and transform sociocultural values in Tamil Nadu, India. Drawing from ethnographic research conducted from 2002 to 2008, the article compares guidelines for counseling HIV-positive mothers established by UNICEF and WHO with decision-making processes and perceptions of HIV-positive mothers. In addition to the financial considerations, three factors are identified as impinging on this decision: (1) a strong sociocultural value in favor of breastfeeding linked to historical traditions and contemporary state and international development discourses, (2) constructions of class identity, (3) the influence of a rights-based discourse in HIV/AIDS advocacy. This wide range of factors points to the difficulty of implementing the international protocols. This is the first study of its kind to closely examine the complex determinants in HIV-positive women's decisions and evaluations of infant feeding methods in India. [HIV/AIDS; infant feeding; global health; India]

Since 1986, when the first case of AIDS in India was detected in a sex worker in Chennai, the country has been faced with a public health crisis more challenging to manage for cultural and political reasons than for biology alone. Despite its low HIV adult prevalence rate of 0.3 percent (UNAIDS 2010), because of India's large population, the country ranks third worldwide in actual numbers of people living with HIV—2.4 million—just behind South Africa and Nigeria (UNAIDS 2008). Responses to HIV/AIDS in the context of India can be seen both to bring cultural values and social relations into sharp focus, yet also to foster sociocultural metamorphoses. This article describes findings that illuminate how local responses to the implementation of global health efforts to prevent the transmission of HIV from mother to child via breast milk both reflect and also transform sociocultural values in India, more specifically in the southern state of Tamil Nadu. Furthermore, the complex nature of these responses presented here points to the difficulty of successfully implementing international protocols for counseling HIV-positive mothers on infant feeding.

HIV can be transmitted from mother to infant during pregnancy, delivery, and breastfeeding. Without any interventions, transmission rates can vary from 15 to 30 percent without breastfeeding and can be as high as 30 to 40 percent with breastfeeding up to 24 months (WHO 2002). HIV-positive mothers using the “full package” of Prevention of Mother-to-Child Transmission (PMTCT) interventions (antiretroviral treatments, cesarean section, and replacement feeding) in industrialized countries have been able to reduce the rates of transmission to less than 2 percent (WHO 2002). Studies suggest that the risk of HIV infection through exclusive breastfeeding itself for up to six months is approximately 4 percent (WHO 2007:2).

However, the possibility of morbidity because of malnutrition, dehydration, or infection from improper use of replacement feeding may exceed 4 percent. And the risk of HIV transmission with mixed breastfeeding and alternative feeding (whether formula, milk, or other liquids and solids) is higher than exclusive breastfeeding (WHO 2007:3). The potential for such risks is high among poor communities, particularly in the Global South where lack of access to clean drinking water or fuel to boil water and bottles for sanitation may preclude access to safe replacement feeding. Furthermore, cultural taboos against bottle-feeding may compel some women to mix bottle-feeding with breastfeeding. In such cases, policies that advocate replacement feeding may only increase, rather than decrease, health risks to infants of some HIV-infected mothers.

As a result, following the lead of international organizations such as the WHO and UNICEF, India's National AIDS Control Organization (NACO) and the Tamil Nadu State AIDS Control Society (TNSACS) have moved away from an earlier policy of uniformly advocating replacement feeding for all HIV-positive mothers to a more nuanced approach in which counselors in the government's Prevention of Parent to Child Transmission (PPTCT) program were charged with the task of evaluating whether or not the following criteria were in place to guarantee the success

of replacement feeding: Affordability. Feasibility. Acceptability. Sustainability. Safety (AFASS). If all AFASS criteria were deemed to be met, a counselor could recommend replacement feeding if a mother requested the counselor's advice. If not, the new guidelines recommended that counselors provide mothers with the pros and cons of both feeding methods and then allow the mother to make an informed choice. Unlike some other countries, it is important to note that the Indian government has not had a program to provide replacement feedings or bottles free of cost to HIV-positive mothers.

This article contributes to a growing body of social science literature on HIV and infant feeding that explores the sociocultural determinants in infant feeding options for HIV-positive women around the world. Most of the earlier studies on this topic are based on research in sub-Saharan and West African countries (Blystad and Moland 2009; de Paoli et al. 2002; Desclaux 2004; Doherty et al. 2007; Hofmann et al. 2009; Kerr et al. 2008; Traoré et al. 2009). Others are large-scale comparative studies across several countries (Cook and Dickens 2002; Desclaux and Alfieri 2009). In this vein, my study is significant insofar as it provides in-depth ethnographic insights into the circumstances, perceptions, and decision-making processes surrounding infant feeding of poor women living with HIV in India that have not previously been documented. Lakshmi Lingam and Siddhi Mankad's 2004 article entitled "Breast Feeding and Infant Feeding Practices Research in India: A Critical Review," published in Patrice Cohen and Suniti Solomon's edited volume, *AIDS and Maternity in India* suggest that in studies on breastfeeding in India, "the presentation of quantitative data is given precedence over its qualitative analysis" (2004:205), and they point to the need for a "socio-anthropological perspective" (2004:206) to this research in the Indian context. Furthermore, they stated that there were no qualitative Indian studies on the relationship between HIV and infant feeding at that time (2004:203). Findings from systematic ethnographic analysis presented here help to fill these gaps.

Research Design and Methods

Drawing from ethnographic data gathered during six months of fieldwork in Tamil Nadu in 2004 and one month in both 2002–03 and 2008, this article seeks to reveal how low-income HIV-positive women make decisions about infant feeding, and how they respond to the shifting terrain of public health recommendations. By doing so, I hope to demonstrate just how complicated, if not impossible, it is to determine the AFASS for individual women in Tamil Nadu in a short counseling interview in the hospital, given the complexity of the sociocultural determinants in this decision-making process.

This article is part of a larger project on HIV/AIDS, women, and maternity in Tamil Nadu. Research methods included ethnographic interviews with 70 women living with HIV/AIDS; interviews with 65 women (of unknown HIV status) during prenatal counseling in government hospitals with a PPTCT program; participant observation in support group meetings; observations of prenatal pre-HIV-test counseling sessions and of public meetings; and discussions with officials, community leaders, counselors, and health care providers. Interviews with HIV-positive women focused on how they came to know about their HIV status; how they and others have responded to their HIV-positive diagnosis; what role they think gender plays in social responses to people living with HIV/AIDS; and their recommendations for improving HIV/AIDS prevention and care. Thirty-two of these women were in the situation of knowing their HIV status before having given birth to all of their children. The remaining 38 women either learned of the HIV status after they had already given birth to their children or they learned of their status before ever becoming pregnant and had not become pregnant since the time of their diagnosis. Interviews with the 32 women who knew their HIV status included discussions about (1) how they made decisions about whether or not to continue with their pregnancy and delivery after receiving an HIV-positive diagnosis, (2) what their experiences were like during birth, and (3) how they made decisions about infant feeding and what they thought about the decisions they had made.

I met HIV-positive women through HIV-positive "Networks" (Community Based Organizations run by and for HIV-positive people); through the Y. R. Gaitonde Centre for AIDS Research and Education (YRG Care); through a government maternity hospital; through Zonta Resources (an NGO); and through a TNSACS counselors' meeting. Interviews lasted approximately one hour each. These women came primarily from the lower socioeconomic segment of society, reflecting global trends because HIV is known now to disproportionately affect people living in poverty (Farmer 1999; Singer 1994). Apart from women who were receiving full financial support from organizations and women who were homeless, the average total household income of the majority of the women in the study was \$1,020.00 per year. The majority identified themselves as unemployed "housewives." The average level of education was the seventh standard; many had received no formal education. Most came from lower caste, *dalit* Hindu and Christian communities. Their average age was 28. Most had been married, yet 47 percent had become HIV/AIDS widows.

I also conducted 15 sessions of participant-observation in support group meetings, public hearings, and legal literacy and media workshops. In addition, I met with peopleworking for governmental institutions and NGOs involved in HIV/AIDS prevention and treatment programs in India and the United States. Finally, I met doctors and counselors in six government hospitals and at YRG Care. All of these interviews explored assessments of the successes and future needs of HIV/AIDS prevention and care programs related to mother-to-child transmission.

I received informed consent for the interviews with all participants in this study.² With consent, all interviews with HIV-positive women were tape-recorded and were conducted in Tamil with the assistance of a research assistant. These were later transcribed and translated into English.

The following sections describe findings pertaining to infant feeding. The ethnographic data is presented in two parts. First, I briefly draw on interviews and observations of counselors to describe how the formal AFASS procedures for counseling were not fully implemented in all instances. Next, I provide in-depth ethnographic data on HIV-positive mothers' own perceptions of and decision-making processes around infant feeding options.

This main ethnographic section of the article, about HIV-positive mothers' perceptions, has six components. It begins with a vignette of one mother who is trying to make sense of the shifts in counselors' recommendations about infant feeding, demonstrating complications that can arise when global health protocols change but are not clearly explained to individual women locally. The second section on mothers' perceptions demonstrates that the cost of providing replacement feeding—especially exclusive formula feeding—was often perceived as prohibitive. As a result, some women mix formula with extra water or alternate formula feedings with milk. Third, I point to the strong cultural value placed on breastfeeding as a powerful symbol of motherhood, of love, and of Tamil ethnic-national identity, leading women who chose to provide replacement feeding because of their HIV status to develop other medical justifications for this choice, as discussed in the fourth section. The following section points to the fact that the international and state-driven "Baby Friendly" initiative, which promotes breastfeeding as beneficial to infant health, also contributes to the normative value associated with breastfeeding. However, bottlefeeding and providing children with milk are associated with middle-class identity. Thus, some HIV-positive women embrace that association when providing their infants with replacement feeding. The final section on mothers' perceptions shows that those HIV-positive women affiliated with HIV/AIDS Networks also drew on a human rights-based discourse to fight against the stigma of HIV/AIDS and bottlefeeding. Following the presentation of my ethnographic data, this article closes with an analysis and discussion about the ways in which my study supports many of the findings of qualitative studies of HIV and infant feeding from other parts of the world but also differs in some ways due, in part, to local variations and, in part, to different analytical approaches.

Ethnography of Decision Making about HIV and Infant Feeding: Counselors and Mothers

How Counselors Evaluated AFASS Criteria

Despite the new guidelines regarding informed choice and the use of the AFASS criteria in counseling, UNICEF representatives whom I met lamented that in practice, counseling is very rarely so in-depth as to allow a counselor either to assess the AFASS of the mother or to provide full and balanced options. In practice, they explained, counselors tend to steer the mothers one way or another. This was certainly what I found in my interviews and observations. A counselor working in one government hospital with a PPTCT program told me that "We tell them not to breastfeed; to only give bottled milk."³ A counselor in yet another PPTCT hospital said: "It is best if they give mother's milk since that provides the baby with immune power (*ethirppu sakti*) so we tell the mothers that."

Ethirppu means opposition; protest; resistance. And *sakti* can be translated as power, or more specifically as female power (Van Hollen 2003; Wadley 1980). So *ethirppu sakti* can be literally translated as "resistance power" (with a gendered connotation), and it is the term used by healthcare practitioners to mean immunity. Toward the end of this article, I explore the significance and creative uses of this term for some HIV-positive women whom I met.

During my fieldwork I observed occasions where a counselor would provide differing recommendations to mothers in what seemed to be the same situation. For example, one day, I met two HIV-positive mothers who had recently delivered their babies through the PPTCT program in one of the government maternity hospitals in Chennai. The first woman, who had delivered her baby the day before I met her, told me, "The people in the hospital told me to breastfeed for five months." Whereas the second woman, who had delivered her baby two days before in the same hospital explained, "Since breastfeeding may cause HIV to pass to the baby, the 'counselors' said that I should not breastfeed. Formula is expensive, but there is no other option." Both of them stated unequivocally that they were given clear instructions from the counselor at this hospital, not that they were given the options and told to decide themselves.

I was curious to understand how the counselors had gone about assessing the AFASS of these two women. The counselor in charge explained that it all came down to one factor, despite the fact that, according to WHO guidelines, all five AFASS criteria must be met to recommend replacement feeding. One woman was receiving care and support through a local NGO. The counselor felt this was essential for the “sustainability” of replacement feeding. Whereas the other woman was not affiliated with any such organization and, therefore, her family would not be able to overcome the social stigma that she would face from community members if she did not breastfeed. But then he added (in English), “It’s really their choice.” This supports arguments made by others that the criteria counselors use to make their assessment are often limited. For example, Desclaux and Alfieri found that in Cameroon, “The assessment by health workers of mothers’ means was based on an informal assessment using a few features such as the woman’s appearance, origin, social status, and occupation, without objective criteria explored in a systematic way” (2009:824).

HIV-Positive Women’s Decisions and Perceptions about Infant Feeding

I wondered about the future impact of this kind of narrow assessment on the lives of women and their newborn children. What might they think down the road about the “choice” of method for infant feeding that they were undertaking? I looked, therefore, to the experiences of HIV-positive women who had employed different methods of infant feeding to get a sense of how they assessed their “choices” in retrospect. Three of the women interviewed (all of whom had migrated to Chennai from other, more rural regions of Tamil Nadu) had given replacement feeding to the first child and breastfed the second. Given my small sample size, it is difficult to know how common this phenomenon was or the extent to which the experiences of these three women can be generalizable for other women with similar approaches to infant feeding methods in India. Nevertheless, I found it useful to examine why these women had used these particular feeding methods when they did and how they themselves evaluated these different feeding practices and their outcomes. How did they make sense of the changing recommendations? Renukha’s story was one of these cases.⁴ Hers was the only case in which a woman had changed feeding methods explicitly in response to the changing recommendations of the counselors. One of the other women first gave replacement feeding by her own choice without knowing she was HIV positive. Although she had tested HIV positive at her prenatal check-up, she had not returned to that hospital for the results and the counselors were not able to track her to inform her. And the other woman had breastfed her second baby, despite the counselor’s recommendation to give replacement feeding, because by the time her second baby was born, her husband had become too ill to work because of AIDS and so they could not afford replacement feeding for their second child.

Renukha: Two Births, Divergent Recommendations

Renukha came from a village in Salem district, and she had never been to school. She had left her first husband and unofficially married her older sister’s husband, while he was still married to her older sister (a highly unconventional arrangement). Renukha and her new husband migrated to Chennai in search of work, and they were living with their two sons (ages two and four) in a government-subsidized home on the outskirts of Chennai where I met them in 2004.

Renukha had given replacement feeding to her first child and then breastfed the second. She had known her HIV-positive status during both deliveries, but the counselors had given opposing advice to her following each delivery in the same hospital, one in 2000 and the other in 2002. As she explained:

For the first child, the doctors and counselors in the government hospital told me not to breastfeed. So I bought Lactogen [formula made by Nestl’e]. I diluted it with water. It was “special” milk that was very thick. We were advised to give that but we couldn’t afford so much so we decided to add more water to it so that we could give it for more days. I thought that would be good because it was so thick to begin with. For the first three months I fed this to my baby. It cost twenty-seven rupees daily to give the Lactogen!

This meant that during those first three months, Renukha’s family spent Rs. 810 per month on formula alone. This represents 22 percent of the average total monthly household income reported of all 70 of the HIV-positive women in my study. She continued:

After three or four months I started feeding Aavin milk with a “tumbler” [a stainless steel cup]. Buying milk was difficult because it was costly. I didn’t have to worry about people questioning why I was not giving mother’s milk because I was working as a servant and my employer had given me a place to stay. I rarely came

out of that house so no one knew that I was feeding my baby Aavin milk and not mother's milk.

Like that, for the first child the doctors told me not to breastfeed, but for the second child, they told me that I should breastfeed. Both deliveries were in the same hospital but they told me different things about milk.

When I asked, "Why do you think there was that difference? Why did they tell you not to breastfeed the first baby and then tell you that you should breastfeed the second one?" Renukha replied:

When I was pregnant with the first child, they gave me tablets so that the HIV would not go to the baby. So I think those tablets protected the baby enough so that it did not need mother's milk, so then it was safe to give cow's milk and that would also help so that the baby would not get HIV from the mother's milk.

But when I was pregnant with the second child, they didn't give me those tablets. They only gave one injection when the baby was born. So the baby did not get *ethirppu sakti* from all those tablets, I think. So that is why I had to give the baby mother's milk for the first three months so that it could get *ethirppu sakti* from the mother's milk. I even gave the colostrum (*cimp⁻al*) because they said that would give *ethirppu sakti*. And after that, after three months, they said that I should start giving cow's milk.

Renukha's first baby was born in the year 2000, and the second was born in 2002. Between the birth of the first child and the birth of the second child, there was a shift from the pilot phase of the PPTCT project during which time Zidovudine was administered in the form of several pills during the pregnancy, to the actual implementation of the official PPTCT program in which Nevirapine was administered as one shot to the mother and one dose of syrup to baby at the time of birth. At the same time, there had also been a shift from recommendations to not breastfeed toward the new approach, which in theory advocated informed choice and AFASS assessment but in practice resulted in many PPTCT counselors recommending exclusive breastfeeding. In her attempt to make sense of the changing procedures and protocols, Renukha had blurred these two distinct phenomena in a highly innovative and logical way by equating the quantity of pills ingested with *ethirppu sakti* in contrast to the single injection. I was impressed by the conclusion she had come to in order to make sense of this shifting terrain of policy and medical practice.

When I asked about the health of both of these children, she said that fortunately both were HIV-negative. But, she added, the first son was very sickly, frail, and always tired, whereas the second son was healthy and very active, and she attributed this to the different methods of feeding. Indeed I had been struck while the boys were playing that, although two years apart, they were the same height. She was bitter about the fact that her first son had not benefited from the *ethirppu sakti* of her own milk. As she put it: "I may be losing all of *my ethirppu sakti*, but I should at least give *ethirppu sakti* to my child. Isn't it so? That's why I gave mother's milk to my second child." This viewpoint that breastfeeding was more beneficial to infants than replacement feeding was not shared by all of the HIV-positive mothers whom I met. In fact, the majority of women whose children were HIV-positive attributed their children's HIV-positive status directly to the fact that they had breastfed (despite the fact that breastfeeding is only one means of mother-to-child transmission of HIV).

Affordability

A common concern expressed across all my interviews was that of affordability of replacement feeding, whether in the form of powdered formula (usu. Lactogen) or cow's milk (such as Aavin milk). For some women, like Karpagam, the cost of replacement feeding was deemed prohibitive and she felt that she had no other option but to breastfeed. As she bluntly stated, "We had no money to buy either formula or cow's milk so I gave mother's milk for the first year." Renukha's response was more typical of most of the women interviewed insofar as she felt that the cost of replacement feeding was a substantial financial encumbrance, but she, nevertheless, did give replacement feeding. However, to cut costs, she watered the formula down and she switched to cow's milk after only three months, and her child's health may have been negatively impacted as a result. Vijaya was another woman who spoke of the burdensome cost of replacement feedings. Her doctor had explained the pros and cons of breastfeeding and replacement feeding and told her that it was her choice. She chose replacement feeding but could not afford to provide formula exclusively so she alternated giving formula and milk. As she said, "It is too costly to only give Lactogen so I switch back and forth: cow's milk sometimes and Lactogen sometimes." According to UNICEF the worst possible scenario is when people give "mixed feedings" like this, switching back and forth between different infant feeding methods.

Maliga also recounted the financial challenges of replacement feeding. As she spoke, her baby lay on a bed, drinking from a bottle:

I bottle-fed my baby from the beginning. I gave Lactogen for four months. Then I started giving Aavin milk. Now my son is an Aavin baby. Both our families knew that I should not breastfeed. When others asked me about this, I told them that I had a sugar problem [i.e., diabetes] and that I was weak. I needed Rs. 300 monthly for Aavin milk and much more for the Lactogen. Being “middle class,” that was difficult. After changing to Aavin milk it was not so hard.

When she said “now my son is an ‘Aavin baby’” she picked him up from the cot where he was lying and gave him a loud kiss on his cheek, beaming with pride.

The majority of the women in my study struggled financially to provide replacement feeding. Yet their accounts clearly suggest that they were rarely able to provide formula exclusively for six months, which is what is recommended by international guidelines for those women who choose the replacement feeding option. The women who were receiving care from YRG Care were, however, in a unique position. They were receiving the “full package” of PMTCT care free of cost, including a full six-month supply of formula, bottles, and a boiler pan. All of the women whom I met through YRG had high praise for the services they were provided by YRG and felt that it compared favorably with what they would have otherwise received through government hospitals. To receive these services, the majority of these women agreed to participate in a National Institute of Health-sponsored clinical trial with support provided by U.S. and European pharmaceutical companies to evaluate antiretroviral strategies to reduce Nevirapine resistance (NIH Clinical Trial ACTG 5207).

Cultural Perspectives on Breast Milk

Maliga’s comment that she would tell people she was bottle-feeding because of diabetes was typical. The fact that women frequently discussed a host of such strategies to deflect questioning or criticism of neighbors and others about their choice not to breastfeed amplifies a powerful cultural norm in favor of breastfeeding in Tamil Nadu. This also reflects the strength of maternal and child public health campaigns to promote breastfeeding in an effort to counteract what is thought to be a modern turn toward formula feedings. Not to breastfeed is, therefore, perceived as neither fulfilling cultural ideals for motherhood nor the prescribed state-level maternal-child health policies, and thus not being a good citizen.

It is not simply that breastfeeding is the cultural norm in the sense that it is the most common practice, but, according to Margaret Trawick, in her ethnography, *Notes on Love in a Tamil Family*, in the Tamil cultural context,

Mother’s milk was a special substance because it was mixed with the feelings of the mother and transmitted them to the child. In particular, mother’s milk contained the mother’s love. [1990:94]

Trawick also explains that in Tamil culture, a mother’s love for her child is “the strongest of all loves and the most highly valued” (Trawick 1990:93). Thus, we see that breast milk is viewed as a substance that transmits the strongest and most highly valued form of love of which humans are capable.

In his analysis of premodern Tamil literature, George Hart points to the elevated cultural value of women’s breasts as a symbol of their fertility and sexuality. He argues that in ancient Tamil literature “woman” as a category is highly sacred, and a woman’s breasts were viewed as the “seat” of her sacred power (Hart 1973:240). We see in these poems a connection between the sacred power of the mother’s breasts and the heroism of her sons when, in one poem, a mother threatens to cut off her breasts if her son is a coward, and in another we see that when a mother recognizes “the valor of her dead son, her breasts give milk again, showing that her joy was so profound that the seat of her sacred power, long since impotent, is suddenly charged with power again” (Hart 1973:240). And in the best known Tamil epic, the *Cilappatikāram*, the heroine, Kannaki, “who, after her husband has been executed unjustly, tears off her right breast and with it causes the city of Madurai to be consumed by fire” (Hart 1973:243). This tale further underscores the symbolic power in Tamil culture of a woman’s breast and the milk that flows from it.

Furthermore, breastfeeding is one of the most potent symbols of Tamil ethnic or national identity. In Sumathi Ramaswamy’s analysis of the deification of the Tamil language as the mother goddess—Tamil T̄ay—in Tamil nationalist identity formation, she points out that one of the ways in which Tamil speakers develop a feeling of kinship with one another is through the construction of the goddess Tamil T̄ay as the mother of all Tamil speakers; they have all shared her womb and they have all been nourished and loved by her breast milk. Tamil language and thus Tamil identity is also seen as being transmitted through the breast milk of all Tamil-speaking mothers. With this in mind, we can appreciate why, in 1956 during legislative debates about replacing English with Tamil as the official language in Madras, one member of the Legislative Assembly in favor of promoting Tamil wrote:

Today our mother tongue reclines royally on the throne of government. For a child, its mother's milk is far more necessary than bottled milk. Even if the children who grow up on bottled milk survive, there are excellent substances (*cattu*) in their mother's milk. Children who drink their mother's milk have fine dispositions as well. [Ramaswamy 1997:107]

This word used to describe the substances of breast milk here—*cattu*—is a polyvalent word meaning truth, virtue, goodness, and moral excellence (Ramaswamy 1997:107). This metaphorical equation of Tamil: breast milk :: English: bottle milk thus aligns bottle-feeding with the colonizing other, the antithesis of truth, virtue, goodness, and moral excellence.

It is only with an understanding of these symbolic meanings of breastfeeding versus bottle-feeding in the Tamil cultural context that we can truly appreciate why HIV-positive women who do not breastfeed are shamed into justifying their actions.

Rationales for Not Breastfeeding

At times, community criticism against HIV-positive women for not breastfeeding became so intense that these women or members of their family felt compelled to divulge the truth about the role of HIV in their decision not to breastfeed and, this, in turn, could have a devastating, negative impact on the women in a context in which HIV/AIDS is highly stigmatized, particularly for women (Van Hollen 2010). For example, Saraswati, who lived in a village in Namakkal District, recounted her postpartum experience after giving birth to her baby in 2000:

My son was very active and the older women in the village would say, "Even when you haven't given mother's milk your son is so active. Imagine how healthy and active he would be if you would breastfeed!" When these older women said that, my grandmother told them why I was not breastfeeding and in that way the whole village came to know about my HIV status.

As a result of the disclosure of her HIV-positive status, Saraswati's in-laws made her life miserable and accused her of infecting their son. Saraswati's parents wanted her to come back home to them so that she could avoid the harsh treatment of her in-laws but she declined, fearing that because the community had come to know of her HIV-positive status, her presence in her natal home would ruin her younger sister's prospects for an arranged marriage. The stigma and discrimination she faced led Saraswati to attempt suicide one day, going so far as to walk down the ladder steps into a well, before thoughts of her son made her reconsider and climb back out.

To avoid public stigma, women therefore have developed creative, culturally informed rationales to avoid the critiques and also to avoid disclosure of their HIV status and the stigma and discrimination that may ensue. For example, Punitha explained,

When neighbors asked me why I was not breastfeeding, I told them that it was because I had jaundice. When I went to the Corporation hospital to ease the milk accumulation in my breasts, I used to buy my own syringes. I told them to use my syringe because I had jaundice. After the injection, I would discard the needle myself.

And Punitha's mother said,

When people asked why she was not breastfeeding, I told them she had cancer. When people asked why we were getting various forms of help, I told them it was because she had had cancer surgery.

Vijaya simply stated,

When neighbors ask me why I am not breastfeeding, I say that my body is weak and that I have no milk. So they don't ask anymore.

Women told me that the doctors and counselors themselves would advise women as to what to tell family or community members to preempt any questioning when patients did not want anyone other than their spouses to know about their HIV status. Lack of milk; lack of strength; jaundice; diabetes; cancer; asthma; chest pains; blood clots; and even having a common cold were effective conversation stoppers that doctors and counselors had recommended. Research from Cameroon and Burkina Faso also shows that HIV-positive women use explanations such as "bad milk" or breast cancer to justify replacement feeding. In those cases, however, women typically felt

compelled to begin breastfeeding initially for a few days or a few weeks to publically demonstrate their interest in breastfeeding before using rationales to stop (Desclaux and Alfieri 2009:826).

“My Son Is an Aavin Baby”

Although the majority of the women I met who were trying to provide replacement feeding used medical explanations to counteract public scrutiny, some, like Maliga, who proudly proclaimed that her son was “an Aavin baby,” were able to enthusiastically embrace a middle-class identity associated with bottle-feeding. Despite the strong cultural norm in favor of breastfeeding, some mothers in Tamil Nadu do not breastfeed their babies for a variety of reasons. As a result, the Tamil Nadu state government and the Government of India have adopted UNICEF’s “Baby Friendly” initiative in maternity hospitals to promote breastfeeding and to deter women from using formula or cow’s milk for all non-HIV-positive mothers (Van Hollen 2002, 2003:ch. 6). This initiative, which was implemented long before the PPTCT program was in place, aims to undercut the move to adopt bottle-feeding as a sign of modernity. It also seeks to counteract long-standing taboos in Tamil Nadu (and elsewhere in India) against feeding newborns colostrum, a taboo that explains why Renukha made a point of saying, “I *even* gave the colostrum.”

Despite the high value placed on breastfeeding in literary and nationalist political rhetoric and in Baby Friendly campaigns, combating the power of advertising of multinational corporations that market infant formula has been a formidable task. Since the 1970s, much has been written about the power of companies, such as Nestlé, which manufactures the popular brand of formula sold in India known as Lactogen, to win over consumer converts around the globe in part by equating bottle-feeding with modern living, freedom for women, and high social status. Scholars working on this topic have also documented the potentially life threatening consequences of this for infants in “resource poor” communities around the world (Rafael 1979; Van Esterik 1989; 2002).

It is also important to note that Aavin, otherwise known as the Tamilnadu Co-Operative Milk Producers Federation Ltd., similarly uses images that associate children’s consumption of milk with high social status. The sole image on the homepage on the Aavin website is of a well-fed white toddler drinking from a glass, with what appear to be Jersey cows in the background, reminding us of the ways in which “whiteness” gets used as a symbol of the modern in the Indian context (<http://www.aavinmilk.com>, accessed on August 31, 2007). The use of the glass here is significant because it is rare to find glassware among lower-class families in India, who would use the more indestructible stainless steel tumblers. Given such advertising, it is not surprising to see Maliga proudly and affectionately kissing her baby as she declared him to be “an Aavin baby,” as if this were a known category indicative of good middle-class parenting skills. Although Maliga represented a small minority of HIV-positive women I met who did not seem embarrassed about bottle-feeding because of a degree of middle-class status attached to it, others still were emboldened to move beyond the shame of bottle-feeding not because of its association with modernity or social class but, rather, as a stance against the discrimination of HIV-positive mothers. The following section examines this emerging phenomenon.

From Cultural Acceptability to “Resistance Sakti”

Studies have shown that women in Tamil Nadu perceive modernity, and new biomedical childbirth technologies as transforming their *sakti* or female regenerative power (Van Hollen 2003). In this research on HIV and breastfeeding, I found the concept of *sakti* constantly rising to the surface of women’s discourse. Because Tamil speakers comprehend the modern allopathic concept of immunity through the use of the Tamil phrase *ethirppu sakti*, there is clearly a sense that HIV/AIDS depletes *sakti*. However, once again in translating allopathic “immune power” into Tamil, people also say that breast milk (and colostrum) increases *ethirppu sakti* in babies.

Self-sacrifice is one of the most powerful attributes of the gendered construction of womanhood in Tamil culture, most notably of motherhood. Nowhere have I witnessed this more than in my discussions with HIV-positive mothers. It is this ethic of self-sacrifice that rings out when we hear Renukha, explaining her decision to breastfeed her second child, say, “I may be losing all of *my ethirppu sakti*, but I should at least give *ethirppu sakti* to my child. Isn’t it so?”

Yet, it is also clear that women are willing to forgo breastfeeding as a great sacrifice to protect the health and lives of their babies. Punitha, a member of the Positive Women’s Network (PWN+), a support and advocacy organization run by and for HIV-positive women, in fact told me that not to breastfeed was a great sacrifice but that this sacrifice itself can also add to a woman’s *sakti*. She explained that to engage in “positive living” and be a mother, she would need to have the extra *sakti* necessary to endure both the economic hardships as well as the social stigma of replacement feeding. Therefore, an HIV-positive woman who could publicly overcome the stigma of

replacement feeding without shame would have more *sakti*, more power. She told me that, although in the past she and her mother had presented other medical explanations for why she was not breastfeeding, after she became more centrally involved with PWN+ her perspective on this changed and she no longer felt ashamed about being open about her HIV status or about the fact that that was why she was not breastfeeding. She had even agreed to speak out on television programs about HIV-positive motherhood. As I will discuss further below, based on their research in Ethiopia and Tanzania in which the majority of the low-income women in their study were desperately trying to adhere to a strict, exclusive breastfeeding regime, Blystad and Moland have argued that “the PMTCT programme and the structural conditions surrounding pregnancy and breastfeeding do not constitute a basis that is suited for HIV related activism” (Blystad and Moland 2009:107). My study, however, suggests that those women who are affiliated with the positive people’s activist networks in India and who were struggling to bottlefeed their infants were in fact attempting to mobilize elements of the PPTCT program as a basis for activism.

Organizations such as PWN+ that advocate “positive living” for HIV-positive women as part of a global discourse of human rights and women rights link this global discourse of rights and empowerment to the local concept of *sakti* to explain how HIV-positive women in Tamil Nadu who face multiple forms of discrimination can find the strength to stand up to cultural norms that threaten their ability to live “positive” lives with this disease. As Angamma from the Society for Positive Mothers’ Development (SPMD) in Namakkal put it,

This disease has depleted the *ethirppu sakti* in my body, but at the same time, I feel that I have gained another kind of “resistance *sakti*” in my life by joining this “network.” I never used to be forthcoming with people. Now I have self-confidence, I conduct meetings and have discussions. I am able to be open about my HIV status. I did a TV program on HIV. This was seen in the village. When people asked if I was in the show, I was spontaneously able to ask, “Oh, did you see me on TV? I’m so glad!”

This feeling of self-transformation as a result of participating in one of the positive people’s activist networks has been noted in other parts of the world as well (Nguyen et al. 2007; Robins 2006) and was echoed by many women whom I met.

What is interesting in the quote above is the way in which Angamma glides from the Tamil use of the phrase *ethirppu sakti* when speaking of the body, and then partially translates this using a half-English, half-Tamil phrase “resistance *sakti*” to refer to the notion of empowerment through collective activism, and implies that these are in a sense equivalents, that the latter has become a replacement for the loss of the former. And, perhaps even more significantly, we can glean a sense that this replacement has led to an improvement in Angamma’s life. HIV positive women like Punitha who become active players in these networks strive to experience replacement feeding within this broader framework of replacing *ethirppu sakti* with “resistance *sakti*” while simultaneously transferring both of these kinds of *sakti* on to their children.

The code switching witnessed here is of a different register than that described by Stacy Pigg in her analysis of language and translation among HIV/AIDS health educators in Nepal (Pigg 2001). In Pigg’s example, development workers struggle to translate biomedical terms into local idioms (such as *ethirppu sakti*) to promote what is considered to be a system of knowledge lacking in the local population. At the same time, they cling to the English terminology of “sex” in response to a perceived lack, not of knowledge, but of comfort and ease in discussing sexuality because of “cultural” obstacles. The use of the English word *resistance* in “resistance *sakti*” could also be read as reflecting a perceived lack of a homegrown perception of activism. But I would suggest that use of the bilingual term *resistance sakti* here, used not by an NGO educator but by a member of an activist organization, should be interpreted as an example of a conscious, or unconscious, play with code switching itself as a sign of participating in transnational rights discourse where Indian women recognize the ways in which cliché, New Age uses of the concept of “*sakti*” are pragmatically mobilized to gain legitimacy in the eyes of international development donors and programmers bent on “localizing.” Crafting a phrase that combines this “local” element with the term *resistance* as a women’s discourse may be considered doubly attractive to international donors who assume that Indian women have much to resist but lack the agency to resist. Perhaps this may be reading too much into what may be an isolated turn of phrase coined by Angamma. But she herself credits her participation in a rights-discourse based organization with transforming her life, so I do not think it is too far-fetched to interpret her phrase in this light. In any event, Angamma’s comment to me reflected a genuine sense that to participate in this movement and to think with this concept of “resistance *sakti*” has indeed transformed her subjectivity and helped her to “live positively.” And women like Punitha have found ways to publicly embrace bottle-feeding as a way to push back against both discrimination against HIV-positive people and against narrow, normative definitions of motherhood.

Discussion and Conclusion

Although I was able to conduct in-depth interviews with 70 HIV-positive women as well as interviews with counselors in PPTCT programs and to observe pre- HIV-test prenatal counseling in hospitals, I was not given permission to conduct observations of post-test counseling of HIV-positive mothers during their prenatal and postpartum care in government maternity hospitals. As such, my ethnographic evidence of actual counseling practice is based primarily on reported narratives of women and counselors. Furthermore, because of the entrenched problems of stigma and the resulting need for extra vigilance about confidentiality, I did not have the opportunity to conduct long-term observations of HIV-positive women's daily infant feeding practices in their homes. Therefore, once again, my data is based primarily on women's reported narratives about their infant feeding practices and the decisions that informed those practices, rather than on long-term direct observation of such practices in homes, communities, and workplaces.

Future research that could provide comparisons among information gleaned through (1) counseling sessions about infant feeding with HIV-positive mothers, (2) in-depth ethnographic interviews with the same HIV-positive mothers who are observed in counseling, and (3) long-term, daily observations of those same HIV-positive mothers' infant feeding practices and discussions about those practices among relatives, friends, and coworkers would be extremely helpful and could test some of the findings presented here. Despite these limitations, my study is the first of its kind to provide data about HIV and infant feeding decision making in India based on in-depth, ethnographic interviews with HIV-positive women, combined with several other forms of ethnographic research described in the methods section above.

My study points to both similarities and differences in research findings when considered in relation to the growing body of social science literature on this topic from other parts of the world. Like my study, several other studies have demonstrated how global health initiatives become localized when implemented on the ground. Many of these studies have foregrounded local, symbolic values given to breastfeeding. For example, studies conducted in sub-Saharan and West African countries point to the central role that breastfeeding plays in the cultural construction of motherhood and argue that given this, along with the problems of entrenched poverty, exclusive breastfeeding for infants of HIV-positive mothers will have greater success than replacement feeding (Hofmann et al. 2009). One of the reasons that women in these studies mention for not wanting to give replacement feeding is a concern that this will be interpreted as a sign of their HIV-positive status and will, therefore, lead to disclosure of their status, which they are trying to keep secret (sometimes even from their spouses) and they fear that this disclosure will lead to stigma and discrimination (Desclaux and Alfieri 2009:825; Traor'e et al. 2009).

My study also demonstrates a high cultural value placed on breastfeeding for mothers in India. Nevertheless, like the majority of the women in the three-country study—comparing Burkina Faso, Cambodia, and Cameroon—conducted by Desclaux and Alfieri (2009:824), the majority of the women in my study also said that if they could afford replacement feeding, they would choose that option despite the concerns about being criticized for not breastfeeding. These women, in consultation with counselors and medical practitioners, had developed creative means to defray such criticisms. Furthermore, the concern that replacement feeding would be interpreted by others as an indication that one was HIV positive was not expressed by the women in my study. This is probably because of the fact that, when compared with some sub-Saharan and West African countries, HIV prevalence rates in India are quite low and most people in India are not aware of knowing anyone with this disease. Moreover, although most of the women in my study were very careful not to disclose their HIV status to many others inside or outside of their kin groups, in no case did I meet an HIV-positive woman who said that her spouse was not aware of her seropositive status, even when the spouse was HIV-negative.

My study also supports the arguments made by other scholars (Desclaux and Alfieri 2009:825) that women not only must weigh deep-seated cultural values and economic realities in their decision-making process but also must negotiate what appear to be mixed messages from two different vertical public health campaigns, one being UNICEF's Baby Friendly campaign, which advocates the nutritional benefits of breastfeeding, and the other being the HIV/AIDS prevention campaigns, which in the past recommended replacement feedings and now recommend either replacement feeding or exclusive breastfeeding. To add to this confusion, my research also suggests that the nature and content of counseling is uneven across hospitals and even among counselors in the same hospital and, whereas in theory counselors are supposed to provide women with informed choices, in practice they tend to be directive, recommending one method of feeding or another. In short, although global and national health policies for infant feeding may appear to be rational and consistent from above, they are rarely perceived or experienced that way by the individual women around the world for whom they are intended. Furthermore, my research is unique insofar as I demonstrate the complex logic that women employ as they attempt to make sense of shifting policy

recommendations on infant feeding over time and also insight into women's own interpretations of the relationship between the different feeding methods they used and the health outcomes of their children.

Much of the social science research tends to represent cultural perceptions of infant feeding as a static factor influencing the decision-making processes. My research, however, demonstrates how cultural values themselves are being transformed as HIV-positive women make sense of their lives and make decisions about their bodies and the bodies and lives of their children. Astrid Blystad and Karen Marie Moland's study in Ethiopia and Tanzania is one study that also points to a cultural transformation of women's perceptions of motherhood and the body. Their study, however, depicts a negative transformation from viewing milk as a symbol of nurture and love to a symbol of death, and thereby, they argue, inhibiting the possibility of activism in the context of the PMTCT programs (Blystad and Moland 2009).

My research also reveals the complex and sometimes contradictory symbols of mother's milk evoked within the context of the PPTCT program. However, my study hints at the possibility for transformations of subjectivity that foster activism within the context of such programs as they become linked to HIV-positive advocacy organizations. Specifically, I found that local notions of power (*sakti*) were evoked in the process of translating biomedical concepts about immunity (both in conversations of the loss of immunity because of HIV/AIDS as well conversations about the immunological benefits of breastfeeding) and that these concepts were further becoming fused with feminist and human rights discourses of "positive living" found among women involved in the HIV-positive networks in such a way as to enable women to challenge cultural ideas about the centrality of breastfeeding in the construction of motherhood, thereby making replacement feeding not only more acceptable but also potentially a sign of their power as HIV-positive mothers and of their resistance to stigma and discrimination that they face as a result of their HIV-positive status. In short, my study demonstrates how some HIV-positive women are actively negotiating and refashioning the discourse of global health agendas and of international rights movements in local idioms to serve their own interests.

Other studies have tended to use ethnographic evidence to make a case for specific policy changes, such as more forceful advocacy in favor of breastfeeding in "resource poor" countries, particularly in cultural contexts where breastfeeding is the norm and is associated with good mothering (Coutsoudis et al. 2008); or recommendations to use specific indicators to direct counseling (Doherty et al. 2007); or to include grandmothers or spouses in decision making to have more adherence to a feeding method (Kerr et al 2008; Traor'e et al. 2009).

Making specific policy recommendations regarding the benefits of breastfeeding or replacement feeding for the majority of the women in resource-poor settings, or even in poor communities in India, is outside of the purview of my expertise. However, by presenting the range of factors that influence HIV-positive women's perceptions and decision-making processes about infant feeding, my research does throw into question the feasibility of the AFASS approach to counseling. In principle, the AFASS approach is laudable, but can a counselor really assess all of the AFASS criteria in the context of a very brief, decontextualized counseling session in a hospital? My research suggests not.

When we contemplate just the factor of cultural "acceptability" alone—the third of the AFASS factors—we see how extraordinarily complex things can get. The profound cultural value and active public health campaigns in favor of breastfeeding make replacement feeding seem unacceptable for some. For most, however, it is something to be creatively navigated by devising other medical rationales for bottle-feeding to avoid the extreme forms of stigma that might result from publicly acknowledging one's HIV status. Other HIV-positive mothers who want to protect their infants through replacement feeding may embrace the association between bottle-feeding and a modern, middle-class identity. And for others still the resistance to the cultural norm itself can be empowering for women activists, mobilizing against the particular gendered nature of discrimination against HIV-positive women and mothers. Medical anthropologists Faye Ginsburg and Rayna Rapp have argued that reproduction must be analyzed not only as a site for the reification of sociocultural forms but also as a site for sociocultural transformation (Ginsburg and Rapp 1995). As HIV/AIDS prevention has come to occupy a central role in reproductive health care and policy in India, reproduction has indeed increasingly become a site for such cultural contestation and transformation as evidenced by mothers involved in the networks. This article has demonstrated how all of these responses to the vexing question of infant feeding for HIV-positive women coexist and jostle up against each other in one part of the world and how this presents a challenge to the implementation of global health recommendations for counseling.

Notes

Acknowledgments. This research was supported by a Fulbright Scholar Program Research Award, an American Institute for Indian Studies Senior Short Term Fellowship, and the University of Notre Dame's Institute for Scholarship in the Liberal Arts.

1. This differs from the global health appellation of Prevention of Mother to Child Transmission (PMTCT). For discussion of why India uses a different appellation, see Van Hollen 2007.

2. I received IRB approval for this research project from Syracuse University as well as from YRG Care.

3. Unless otherwise indicated, all quotes from interviews are translated from the original Tamil. Words spoken in English within Tamil conversation appear in italics.

4. Unless otherwise indicated, all names are pseudonyms to protect the confidentiality of the participants in this research.

References Cited

- Blystad, Astrid, and Karen Marie Moland
2009 Technologies of Hope? Motherhood, HIV and Infant Feeding in Eastern Africa. *Anthropology and Medicine* 16(2):105–118.
- Cohen, Patrice, and Suniti Solomon, eds.
2004 AIDS and Maternity in India: From Public Health to Social Science Perspectives: Emerging Themes and Debates. Pondicherry, India: Institut Français de Pondichéry.
- Cook, R. J., and B. M. Dickens
2002 Human Rights and HIV-Positive Women. *International Journal of Gynecology and Obstetrics* 77:55–63.
- Coutsoudis, Anna, Hoosen M. Coovadia, and Catherine M. Wilfert
2008 HIV, Infant Feeding and More Perils for Poor People: New WHO Guidelines Encourage Review of Formula Milk Policies. *Bulletin of the World Health Organization* 86(3):210–214.
- de Paoli, Marina Manuela, Rachel Manongi, and Knut-Inge Klepp
2002 Counselors' Perspectives on Antenatal HIV Testing and Infant Feeding Dilemmas Facing Women with HIV in Northern Tanzania. *Reproductive Health Matters* 10(20):144–156.
- Desclaux, Alice
2004 Socio-Cultural Obstacles to the Prevention of HIV: Transmission through Breastfeeding in West Africa. *In AIDS and Maternity in India: From Public Health to Social Science Perspectives: Emerging Themes and Debates*. Patrice Cohen and Suniti Solomon, eds. Pp. 185–194. Pondicherry, India: Institut Français de Pondichéry.
- Desclaux, Alice, and Chiara Alfieri
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* 69:821–829.
- Doherty, Tanya, et al
2007 Effectiveness of the WHO/UNICEF Guidelines on Infant Feeding for HIV-positive Women: Results from a Prospective Cohort Study in South Africa. *AIDS*. 2007: 1791–1797.
- Farmer, Paul
1999 *Infections and Inequalities: The Modern Plagues*. Berkeley: University of California Press.
- Ginsburg, Faye D., and Rapp, Rayna
1995 Introduction. *In Conceiving the New World Order: The Global Politics of Reproduction*. Faye Ginsburg and Rayna Rapp, eds. Pp. 1–17. Berkeley: University of California Press.
- Hart, George
1973 Woman and the Sacred in Ancient Tamilnad. *Journal of Asian Studies*. 32(2): 233–250.

Hofmann, Jennifer, Manuela De Allegri, Malabika Sarkar, Mamadou Sanon, and Thomas Böhler
 2009 Breast Milk as the “Water That Supports and Preserves Life”: Socio-Cultural Constructions of Breastfeeding and Their Implications for the Prevention of Mother to Child Transmission of HIV in Sub-Saharan Africa. *Health Policy* 89:322–328.

Kerr, Rachel Bezner, Laifolo Dakishoni, Lizzie Shumba, Rodgers Msachi, and Marko Chirwa
 2008 “We Grandmothers Know Plenty”: Breastfeeding, Complementary Feeding and the Multifaceted Role of Grandmothers in Malawi. *Social Science and Medicine* 66:1095–1105.

Lingam, Lakshmi, and Mankad, Siddhi
 2004 Breastfeeding and Infant Feeding Practices in India: A Critical Review. *In* *AIDS and Maternity in India: From Public Health to Social Science Perspectives—Emerging Themes and Debates*. Patrice Cohen and Suniti Solomon, eds. Pp. 195–210. Pondicherry, India: Institut Français de Pondichéry.

Nguyen, V. K., C. Y. Ako, P. Niamba, A. Sylla, and I. Tiendrebeogo
 2007 Adherence as Therapeutic Citizenship: Impact of the History of Access to Antiretroviral Drugs on Adherence to Treatment. *AIDS* 21:31–35.

Pigg, Stacy Leigh
 2001 Languages of Sex and AIDS in Nepal: Notes on the Social Production of Commensurability. *Cultural Anthropology* 14(4):481–541.

Raphael, Dana, ed.
 1979 *Breastfeeding and Food Policy in a Hungry World*. San Francisco: Academic Press.

Ramaswamy, Sumathi
 1997 *Passions of the Tongue: Language Devotion in Tamil India, 1891–1970*. Berkeley: University of California Press.

Robins, S.
 2006 From “Rights” to “Ritual”: AIDS Activism in South Africa. *American Anthropologist* 108(2):312–323.

Singer, Merrill
 1994 AIDS and the Health Crisis of the U.S. Urban Poor: The Perspective of Critical Medical Anthropology. *Social Science and Medicine* 39:931–948.

Traoré, Annick Tijou, Madina Querre, Hermann Brou, Valérie Leroy, Alice Desclaux, and Annabel Desgrèges-du-Lou
 2009 Couples, PMTCT Programs and Infant Feeding Decision-Making in Ivory Coast. *Social Science and Medicine* 69:830–837.

Trawick, Margaret
 1990 *Notes on Love in a Tamil Family*. Berkeley: University of California Press.

UNAIDS
 2008 *Report on the Global AIDS Epidemic*. Technical Report. Geneva: UNAIDS.

2010 India. Electronic document. <http://www.unaids.org/en/CountryResponses/Countries/india.asp>, accessed on January 19, 2010.

Van Esterik, Penny
 1989 *Beyond the Breast–Bottle Controversy*. New Brunswick: Rutgers University Press.

2002 Contemporary Trends in Infant Feeding Research. *Annual Review of Anthropology* 31:257–278.

Van Hollen, Cecilia
 2002 “Baby Friendly” Hospitals and Bad Mothers: Maneuvering Development in the Postpartum Period in Tamil Nadu, South India. *In* *The Daughters of Hariti: Birth and Female Healers in South and Southeast Asia*. Santi Rozario and Geoffrey Samuel, eds. Pp. 163–181. New York: Routledge.

2003 *Birth on the Threshold: Childbirth and Modernity in South India*. Berkeley: University of California Press.

2007 Navigating HIV, Pregnancy, and Childbearing in South India: Pragmatics and Constraints in Women’s Decision-Making. *Medical Anthropology* 26(7):7–52.

2010 HIV/AIDS and the Gendering of Stigma in Tamil Nadu, South India. *Culture,*

Medicine and Psychiatry 34(4):633–657.

Wadley, Susan, ed.

1980 *The Powers of Tamil Women*. Syracuse, NY: Maxwell School of Citizenship and Public Affairs, Syracuse University.

WHO

2002 *Prevention of HIV in Infants and Young Children: Review of Evidence and WHO's Activities*. Electronic document. <http://www.who.int/hiv/mtct/ReviewofEvidence.pdf>. Accessed on January 7, 2010.

2007 *HIV and Infant Feeding: Update*. Based on the Technical Consultation held on Behalf of the Inter-Agency Task Team (IATT) on Prevention of HIV Infection in Pregnant Women, Mothers, and Their Infants, Geneva, 25–27 October 2006. Geneva: WHO, UNAIDS, UNICEF, UNFPA.