

UNICEF's Support to Free Infant Formula for Infants of HIV-Infected Mothers in Africa: A Review of UNICEF Experience

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Introduction

UNICEF began supporting Governments in providing services to HIV-infected mothers to prevent the transmission of HIV from mother to child (PMTCT) in 1998. Initially this support was to 11 countries in order to pilot the feasibility of PMTCT services, but more recently an increasing number of countries have started PMTCT activities or are planning to do so. As of December 2002 UNICEF had provided support to the planning and/or implementation of PMTCT in 54 countries. These projects support pregnant women with HIV testing and counseling, improved health care, anti-retroviral drugs, and counseling on infant feeding options.

The risk of transmission of HIV through breastfeeding is estimated to be between 10 and 20% when breastfeeding is continued for 2 years. The PMTCT pilot sites were modeled after a study from Thailand which showed that MTCT could be reduced by 50% when mothers were given a short course of AZT and then used commercial infant formula to feed their babies.

In 1998 the UNICEF/WHO/UNAIDS (WHO, 1998) guidelines on HIV and infant feeding were published. These guidelines recommended a selection of infant feeding options for HIV-positive mothers who choose not to breastfeed their infants, including home modified animal milk or commercial infant formula. These guidelines also stated that HIV-infected mothers should be supported in their choice, whether they choose breastfeeding or replacement feeding.

When developing the pilot projects, it was recognized that many HIV-positive mothers would not be able to afford breastmilk substitutes. A UNICEF survey of the prices of commercial infant formula on the market in several countries showed that formula was too expensive for many mothers in resource poor settings. An infant needs about 20 kg of formula during the first 6 months of life and a further 25 kg during the following 6 months. In Kenya, Zimbabwe, India and Nicaragua this would mean that the cost of formula for one year would be equal to around, 139%, 34% and 64% of GNP per capita respectively. In Kenya the cost of formula would be equal to 84% of the minimum urban age, and in Brazil this would be 22%.

In order to provide poorer HIV-positive mothers with an alternative to breastfeeding, UNICEF decided to provide formula where the Governments requested such support. From the outset there were concerns about possible negative side effects of the provision of free formula. However it was hoped that the institutionalization of counseling on infant feeding and the carefully targeted distribution of the formula would prevent any potential negative impact. Therefore formula was distributed only to those mothers who, after counseling on the advantages and disadvantages of all infant feeding options, including formula, decided that they wanted to give formula but could not afford it.

This paper sets out to present the experiences with the procurement, distribution and use of free formula in PMTCT programs. Most of the countries in Africa that provided free formula did so with UNICEF support. Botswana and South Africa used Government resources to procure and distribute the formula. Experiences with the use of formula in UNICEF supported programs and in South Africa and Botswana will be presented and followed by suggested conditions for the use of free formula. The future role of UNICEF in supporting PMTCT programs that decide to provide free formula will also be considered.

Methodology

There are very few published studies and reports describing experiences with free formula in PMTCT sites, mainly because most of the reports describing experiences with the use of formula are internal program evaluation or formative studies. UNICEF offices supporting PMTCT interventions were contacted and requested to send any documented experiences with the use of formula in their PMTCT sites. These reports, together with internal UNICEF documents and documents obtained through internet search were used to describe the experiences with the use of formula. As already mentioned, in South Africa and Botswana the Government used its own resources to procure and distribute infant formula as part of the PMTCT services. However, several documented experiences from these two countries have also been included in this review because, although the formula was not bought by UNICEF, UNICEF did support several other aspects of the infant feeding component of the PMTCT projects in these countries. There is no evidence that the experiences with free formula in these countries differed significantly as a result of the source of the formula being different. Indeed, it appears that many of the findings from these two countries were similar to those in the other countries where UNICEF was providing the infant formula.

Over 30 documents including formative research, assessments, evaluations and internal UNICEF communications were collected. After reviewing the content about 15 documents were included in the review because they contained detailed enough information on the use of formula in Africa. These documents were further analyzed with regards to a set of key issues related to program planning and implementation and perceptions and experiences from HIV-positive mothers, communities and health workers.

Procurement of formula

When a woman decides not to breastfeed she must have access to a reliable supply of formula. If the formula runs out, she has no safe alternative food for her baby. Care must also be taken to ensure that the provision of formula does not become a marketing device encouraging spillover of artificial feeding to the majority of infants who would benefit from breastfeeding. Communities must not become flooded with free formula. In the past, the provision of unlimited supplies of free formula to maternities by manufacturers was one of the most successful ways of promoting formula. The World Health Assembly reiterated clearly in 1994 that there should be no donations of free or subsidized supplies of breastmilk substitutes in any part of the health care system. Thus, in order to guarantee a constant and reliable supply of formula, in a controlled manner that avoids its misuse, and to comply with the International Code of Marketing of Breast milk Substitutes, UNICEF chose not to accept donations of formula from manufacturers when examining ways to make formula available for PMTCT. This was also in line with the UNAIDS/WHO/ UNICEF HIV and infant feeding guidelines (WHO, 1998), which recommended the establishment of a sustainable supply system if commercial infant formula were to be provided free or at subsidized prices to HIV-positive mothers.

A central infant formula procurement system was established through UNICEF Supply Division in Copenhagen, Denmark. UNICEF country offices were permitted to buy formula only through this channel and procurement of formula on the local market with UNICEF funds was specifically prohibited. Reasons for this included:

- To ensure that all formula used in the pilots met the quality requirements of the Codex Alimentarius Standards for infant formula (Volume 4, Second Edition, FAO Rome 1994), and the Recommended International Code of Hygiene Practices for Food for Infants and Children (CAC/RCP 21-1979).
- To ensure that UNICEF funds would only be used to purchase formula from a company that was not engaged in activities that violate the International Code of Marketing of Breastmilk Substitutes and subsequent relevant resolutions of the World Health Assembly, as determined by UNICEF's Nutrition Section, New York on the basis of information received from country offices and NGO partners, particularly IBFAN. Code violators were not invited to bid.
- To provide formula in generic packages, thus avoiding promotion of any one brand of formula or company, and to have labels that complied with the Code and illustrated how to prepare and feed the product by cup, rather than by feeding bottle since the latter carries greater health risks. To this end, each formula package contained two plastic scoops: one to measure water and the other to measure powder.

Based on an exhaustive pre-qualification process of suppliers and competitive bidding, one manufacturer based in France was selected to provide the product.

Product information

The commercial infant formula was distributed in carton boxes with an inner foil wrapping containing 500 grams of powdered formula suitable from birth. Carton boxes were used because they were cheaper than tins and weighed less. Larger packages were considered unsuitable because of risk of contamination and deterioration after opening.

A label for the boxes was developed which was in accordance with the condition of the International Code of Marketing of Breastmilk Substitutes (This label was made available in French, Spanish and English). In countries with national Code legislation in place which differed from the International Code in terms of labeling, UNICEF country offices had to ensure that the label was in accordance with national legislation as well as the Code. Given that Article 9.2 of the International Code requires infant formula to be labeled in an appropriate language, UNICEF country offices were required to provide text for labels in local languages where necessary.

Since it was recognized that the user of the commercial infant formula might not have appropriate measuring utensils, the cartons also contained two scoops, a larger one for measuring 30 ml of boiled water and a smaller one holding the correct amount of formula for each 30 ml of water.

Lessons learned

Formula uptake

Between 1999 and 2002 the governments of eight countries in Africa (Benin, Burundi, Cote d'Ivoire, Kenya, Nigeria, Rwanda, Uganda and Zambia) requested and received support from UNICEF for the provision of free formula. Some other governments showed initial interest, but decided later not to distribute free formula. In Botswana and South Africa the governments decided to use their own resources to buy infant formula on the local market. UNICEF distributed a total of 365,351 packs of formula at a total cost of US\$412,077 (about US\$2.25 per kg). It is not clear how much of this formula actually ended up in the hands of HIV-positive mothers. Several countries over-estimated their requirements and excess stocks had to be disposed of in a manner that did not violate the Code.

Most countries decided to distribute formula for only 6 months, since after 6 months the child is no longer dependent on milk. However, many of the mothers who could not afford to buy infant formula during the first 6 months of their infants' lives were also not able to provide good nutritious food after 6 months. The governments of Botswana and Zambia thus changed their policy to provide free formula up to 12 months and also to those mothers who decided to breastfeed initially, followed by early cessation of breastfeeding (PMTCT Advisory Group, 2001).

The uptake of free formula by mothers varied between and within countries. In Botswana 89% of the mothers decided to formula feed (PMTCT Advisory Group, 2001) and according to UNICEF monitoring data, in Rwanda in 2001 the formula uptake was around 87% and in Uganda and Zambia around 60%.

Logistics

Perhaps the most critical component of an intervention providing free formula to HIV-positive mothers is the existence of an effective supply system. Based on requests from Governments that included specific quantities and delivery dates, UNICEF procured and shipped the formula from Europe. In-country distribution then became the responsibility of the local Government. Although in most cases procurement and shipment of formula was achieved within requested time limits, distribution in-country to the PMTCT sites and to the HIV-positive mothers was not always adequate. In Botswana about 40% of the mothers reported that they had run out of formula at some stage because they were not given enough at the clinic. According to health workers, supplies were sometimes late in arriving. Poor communication between different departments in the hospital resulted in some mothers not receiving the required amounts of formula (PMTCT Advisory Group, 2001). Chopra (2000) reported that most of the mothers interviewed who were receiving PMTCT services in South Africa said that the quantities of formula received were insufficient. It is important to note that it was not always an inadequate supply system that was to blame for mothers running out of formula. Matoya et al (2002) reports that in the first year of the program with passive follow-up only 50% of women initially receiving infant formula returned for a new supply of formula at 6 weeks.

Strategies used by mothers who run out of formula included: buying an alternative milk or formula, giving sugar and water or fruit drinks between formula feeds, giving fewer feeds per day, over-diluting the formula (Chopra, 2000) and going to the clinic earlier than scheduled to get a new supply (PMTCT Advisory Group, 2001).

Supporting a mother's choice

The WHO/UNAIDS/UNICEF guidelines on HIV and infant feeding (WHO, 1998) recommend that HIV-positive mothers should be counseled on the advantages and disadvantages of infant feeding options and should be assisted to select the best option given her specific circumstances. It is the mother who makes the final choice on how to feed her child and she should be supported in whatever method she chooses.

One of the arguments against free formula provision is that women may be induced into choosing formula as the feeding option even where this option is inappropriate to her living circumstances (Coutsoudis et al, 2002; Dabis et al, 2001). To prevent this, adequate counseling is necessary on the advantages and disadvantages of several infant feeding options, including discussion of whether she can prepare formula safely, and whether she will be pressured to breastfeed by members of her family or community.

The PMTCT Advisory Group (2001) found that in Botswana most women had only discussed HIV and infant feeding once with a health worker and this discussion generally focussed on the risk of MTCT through breastfeeding. Over 70% of the women reported that they were advised to formula feed. WHO/UNAIDS/UNICEF (1998) recommended that where free formula is provided the mother should be shown how to prepare it safely. However in Botswana less than half of the mothers in the PMTCT sites had received such demonstrations (PMTCT Advisory Group, 2001).

In Zambia, 42 observations of infant feeding counselling sessions in UNICEF-supported PMTCT sites (UNICEF, 2002) revealed that counsellors did provide information about the advantages and disadvantages of the various infant feeding options, but in the majority of cases little or no time was spent on discussing the mother's circumstances and living conditions. For example, the counsellor asked whether the mother had access to adequate supplies of water in only 6 of the 42 observed counselling sessions. During interviews about 70% of the service providers showed a clear preference for a certain infant feeding option, in most cases formula, and most were negative about mothers who chose breastfeeding. The mothers who chose formula feeding were taught how to prepare it safely and they received free formula for 6 to 12 months (UNICEF, 2002).

In Rwanda there was also a tendency among service providers to recommend formula to all mothers (UNICEF Pop council, Rwanda, 2002), despite the fact that in Rwanda only 41% of the population has access to improved water supply and 8% to improved sanitation (WHO, UNICEF, 2000)

In South Africa where the policy is also to counsel mothers to help them choose the best infant feeding option it is reported that health workers sometimes pressure mothers to choose formula by telling them during the pre-testing counseling that if they are HIV-positive they should not breastfeed. If these mothers do test HIV-positive and they receive free formula they do not receive adequate information on how to make up the formula feed safely and consequently most formula feeds are prepared incorrectly (Chopra, 2000)

Support from health workers

There are several factors which contribute to poor counseling, including lack of staff or time. In several cases the counselors skills and knowledge on HIV and infant feeding was inadequate, often due to poor training. In Zambia only about 40% of the service providers interviewed had attended a separate course on infant feeding counselling (UNICEF, 2002).

In the UNICEF- supported PMTCT project in Rwanda infant feeding counseling is among the weakest services in the PMTCT package because of the lack of clear protocols or guidelines that providers can refer to. In addition, very few service providers have received training on HIV and infant feeding. This has resulted in poor knowledge on the part of service providers on the advantages and disadvantages of different feeding options (UNICEF Rwanda, 2002). In Botswana ((PMTCT Advisory Group, 2001) many of the staff at PMTCT sites reported that they felt particularly uncomfortable when counselling

on infant feeding practices. Only 49% of the staff at PMTCT sites was satisfied with the training they had received

Mixed feeding

Mixed feeding, where a mother gives both breastmilk and other foods and liquids to her baby, is the worst feeding option because it subjects the child to the risks associated with artificial feeding as well as the risk of transmission of the HIV virus. Studies suggest that exclusive breastfeeding during the first few months of life may be associated with a lower risk of HIV transmission than mixed feeding, while exclusive replacement feeding will eliminate the risk of transmission of HIV but increases risks of other diseases.

As mentioned earlier, running out of formula is one of the reasons that HIV-positive mothers do not always exclusively formula feed. But there are other reasons such as practical difficulties in preparing formula at night, resulting in mixed feeding (Horizon's program, 2001).

Dr. Ruth Nduati found in her study in Nairobi, Kenya that at least 30% of the mothers assigned to the formula feeding group were also breastfeeding. Mixed feeding does not only occur among HIV-positive mothers who choose formula feeding; Mothers who choose breastfeeding also sometimes use mixed feeding. In Botswana, more than 80% of the HIV-positive mothers who chose formula were exclusively formula feeding. Exclusive breastfeeding during the first 6 weeks was practiced by only 27% of the HIV-positive mothers who had chosen breastfeeding as their feeding option (PMTCT Advisory Group (2001).

Acceptability

The success of exclusive formula feeding depends very much on the cultural acceptability of this option and how well HIV-positive mothers are able to deal with possible stigma or pressure. In Zambia in PMTCT projects supported by the Horizons project (Horizons, 2001) only about half of the mothers for whom formula was recommended actually chose this option, even though the formula was provided free of charge. Reasons given for this by mothers include various social and convenience-related factors.

Involvement of male partners in making decisions about infant feeding seems to be a key factor in the acceptability of formula use by HIV-positive mothers. In both Zambia and Kenya greater levels of male involvement was associated with a higher uptake of formula (Horizon's 2001). Family issues are particularly difficult for younger, newly married women to manage (UNICEF, Zambia 2002). In Botswana (Tlou et al, 2000) the father and grandmothers of the baby have considerable influence on the choice of infant feeding method.

Stigma

There is a danger, particularly in high HIV-prevalence countries, that the receipt of free formula through PMTCT projects results in formula feeding becoming associated with being infected with HIV (Nyblade, 2000). In Zambia and Kenya it seems that poorer mothers in particular face social pressures to breastfeed, and although they might start out formula feeding, they later change to breastfeeding (or mixed feeding) due to pressure from friends or neighbors, and give the free formula to older children (Horizons, 2001)

Dealing with stigma should therefore be a fundamental aspect in the counseling of mothers. In South Africa (Chopra, 2000) in an attempt to avoid stigma, mothers used a variety of excuses to explain the fact that they were not breastfeeding. These included that the formula was recommended by the doctor, that their breastmilk was insufficient, or that they had TB or breast sores.

Safety

Although replacement feeding of infants of HIV-positive mothers is only recommended when it is affordable, feasible, acceptable, safe and sustainable (WHO, Oct 2000) there is no well defined definition of what “safe” means in the context of mothers living in resource poor settings. Guidance provided by several formula manufacturers does give some indication of what they consider to be safe preparation of infant formula. First of all bottles and utensils need to be sterilized by boiling them for 5 to 10 minutes (Nutricia, 2003, Abbott industries, 2003, Nestle, 2003). Then the water for the formula also needs to be boiled for 10 minutes (Nutricia, 2001) before the formula powder can be added. Prepared formula can be kept in the fridge for up to 24 hours (Nutricia, 2003; International association of infant food manufacturers, 2003) and outside the refrigerator at room temperature for 2 hours (Mead Johnson, 2003; Nestle, 2003). Prepared formula that has not been consumed by the baby should be thrown away (Nutricia, 2003; Nestle, 2003). According to Abbott Industries (2003) opened cans of powdered formulas need to be stored in a cool, dry place and need to be used within one month after opening the can.

Preparing safe formula feeds requires a substantial amount of work and time on the part of the mother, particularly in resource poor settings. For instance it takes about 10-15 minutes to bring water to a boil using the charcoal stoves that are common in many areas of Africa. This has implications for both time and fuel requirements.

As mentioned earlier, mothers who chose formula feeding are not always supported in preparing and feeding the formula in a safe manner. Consequently it is no surprise that in various sites where free formula was provided it was not prepared, stored or fed in a safe manner. Research in Khayelitsha showed that mothers had received little information on safety issues and consequently most formula feeds were prepared incorrectly (Chopra 2000). A study in Botswana (PMTCT Advisory Group, 2001) showed that at least 35% of HIV-infected mothers did not clean the feeding container before every. Also only 27% of HIV-infected mothers living in urban areas in Botswana have a refrigerator, hence, most

mothers will have to prepare all feeds separately. Seventy percent of those that had a refrigerator were storing the prepared formula at room temperature.

The only available data on bacteriological contamination and nutrient concentration of prepared free formula feeds come from Durban, South Africa (E. Bergstrom, 2003). In this study among women attending a PMTCT clinic the mothers had received extensive counselling on hygiene and milk preparation as part of the support they received from the clinic. Seventy percent of the mothers had received free formula from the clinic. Sixty-four percent of the milk samples collected from the mothers contained E.coli and 26% Enterococci. None of the samples contained Shigella or Salmonella. Boiling water separately for every feed significantly reduced the risk of contamination compared to boiling and storing water for several feeds. In contrast, the risk of preparing contaminated milk during the night was higher if each feed was prepared separately. Between 28 and 44% of the collected samples were over diluted. This study shows that strict compliance with the guidelines on hygienic preparation, storing and feeding of formula is essential to reduce the risks of formula feeding, even in (peri)-urban settings.

The information available on the safety aspects of formula use in resource poor settings is inadequate. A study was conducted by Dunn et al in parts of Abidjan, Cote d'Ivoire on water safety. This study showed that even though municipal water is widely available and of good drinking quality, it is often stored improperly at household level, resulting in many of the water samples containing E.coli. The researchers conclude that if replacement feeding is going to be more widely used, interventions are needed to make the stored water safer.

Spillover

According to WHO/UNAIDS/UNICEF/UNFPA in the revised guidelines on HIV and infant feeding (WHO, 2003), "spillover" is the term used to describe the situation when new mothers, who either know that they are HIV-negative or are unaware of their HIV status, do not breastfeed, breastfeed for a short time, or mix-feed, due to unfounded fears about HIV, misinformation, or the ready availability of breast-milk substitutes

This seems to have happened in Botswana (PMTCT Advisory Group, 2001) and might have resulted in declining levels of exclusive breastfeeding in the general population. Researchers found that, during the first week of life, more infants of uninfected mothers at PMTCT sites received breastmilk substitutes than infants of mothers of unknown status in non-PMTCT sites. Furthermore significantly fewer were exclusively breastfed (52% vs. 66%). Overall exclusive breastfeeding rates are lower among uninfected mothers at PMTCT sites than mothers of unknown status (21% vs. 37%). The researchers state that "the provision of free formula and advice regarding formula feeding to HIV-infected mothers may be undermining the message of breastfeeding, and particularly exclusive breastfeeding, by uninfected mothers".

Coy et al (2002) report on two other behaviours leading to spillover in South Africa. First, some nurses reported that women are providing some of the free formula to siblings

and other family members. Secondly, there have been reports that some free formula is sold in the community.

Sustainability

Provision of free formula is a significant part of the budget of PMTCT interventions. According to estimates by Schwartlander et al (2001) the cost of free formula is about 25% of the cost of PMTCT programs using short course AZT and about 50% of the costs when the nevirapine regimen is used. The major cost items in South Africa's PMTCT project are drugs (30%), staff salaries (29%), and infant formula (24%) (Wilkinson & Gilks)

According to a Markov chain model simulation of the cost effectiveness of PMTCT interventions (Soderlund et al, 1999), the "appropriateness of formula feeding was highly cost effective only in settings with high sero-prevalence and reasonable levels of child survival and dangerous where infant mortality was high or the protective effect of breast feeding substantial."

Conclusions and the way forward

While it carries its own risks of increased childhood illness, replacement feeding, including the feeding of commercial infant formula, is the only way to eliminate the risk of postnatal HIV transmission from mother to child. UNAIDS/WHO/ UNICEF (WHO, 2000) recommend that HIV-positive mothers should give replacement feeding hen replacement feeding is affordable, feasible, acceptable, sustainable and safe. The review of experiences from the field has shown that inclusion of free formula as part of the PMTCT package has addressed the affordability component of these conditions. However in many cases it has left mothers struggling with issues around feasibility, safety, and acceptability, increasing the risk of mixed feeding and consequently increased risk of morbidity and mortality due to diarrhea, respiratory infections and MTCT. There is a also a real risk of negatively influencing infant feeding practices by HIV-negative mothers and mothers of unknown HIV-status. Experience has shown that in many cases mothers who cannot prepare formula safely and for whom the use of formula was not safe did receive and try to use free commercial infant formula. The ironic thing is that it is really only the better off women, those with better incomes, access to safe water and higher levels of education, who can safely use free formula. PMTCT interventions providing free formula therefore mainly support these better off women, often ignoring the needs of the poorer women who do not have any alternative to breastfeeding, at least for some months.

Guidelines for procurement and distribution of free or subsidized formula

Based on the experiences with distribution of free formula, WHO/UNAIDS/UNICEF/UNFPA in their revised guidelines on HIV and infant feeding

(WHO, 2003) suggest the following set of conditions that need to be in place before free or subsidized formula is provided:

- Formula should only be made available to HIV-positive women and their infants where replacement feeding is acceptable, feasible, sustainable and safe. Government should procure formula through normal channels.
- Implementation and enforcement of the Code (with particular emphasis on the procurement and distribution of formula and the product and packaging itself) should be ensured.
- Guidelines for the staff who will distribute formula should be in place, specifying which HIV-positive women will receive it, under what conditions, how frequently and for how long, where it will be distributed, etc.
- Counselors trained in breastfeeding, complementary feeding and HIV and infant feeding should be available. They need to be skilled in providing non-biased counseling, guidance and support to all mothers.
- Communication strategies that contextualise HIV and infant feeding issues amongst the general population should be in place, as the provision of free formula does not guarantee that exclusive formula feeding will be practiced, due to stigmatization
- Information on the health and nutrition status (especially growth) of infants fed with breast-milk substitutes should be collected and analyzed to enable the monitoring of health outcomes.
- Once started, formula should continue to be supplied to infants for at least the first six months of age, followed by formula or some other kind of milk up to at least one year, and preferably up to two years. Formula or milk should also be available starting at any time in the first year for infants of mothers who practice breastfeeding followed by early cessation to facilitate transition and feeding thereafter.
- Countries that provide free or subsidized infant formula for HIV-positive women who choose that option, should consider some type of support to HIV-positive women who choose other options. Aside from issues of equity, this helps to prevent the promotion of one option over another and to prevent mothers choosing the option that will give them something for free.
- Program planners and procurement agencies have to ensure that all aspects of supply management are considered in the planning phase of programming, and that supplies are carefully monitored to ensure that infants who need them always have them, but that there is no spillover to others.

UNICEF and free formula

Based on these experiences UNICEF developed its policy in 2002 to end the procurement and distribution of free formula as part of its support to PMTCT. In order to avoid abrupt cessation in some countries distribution of free formula donated by UNICEF will continue through 2003 to ensure a continued supply of free formula to those children who started receiving it before cessation of the program, for as long as they need it (6 month in most countries, and 12 months in others).

UNICEF's support to Governments in the area of HIV and infant feeding will focus on the following five components:

1. Support to the development of national policies on optimal infant feeding for all infants including those of HIV-positive mothers
2. Support to the adoption and monitoring of legislation to implement the International Code of Marketing of Breastmilk Substitutes and subsequent relevant WHA resolutions
3. Promotion of good infant feeding practices by the general population including the development of communication strategies and support to the Baby-Friendly-Hospital Initiative (BFHI)
4. Support to the counseling of HIV-positive mothers and helping them carry out whatever feeding option they choose, breastfeeding or replacement feeding, as safely as possible
5. Monitoring, evaluating and disseminating experiences in the area of HIV and infant feeding.

Where Governments are interested and have resources to provide free or subsidized formula, UNICEF will support them in conducting an assessment of the feasibility, safety, acceptability and sustainability of the use of infant formula. UNICEF will also provide support to ensure that the necessary conditions are in place to make the distribution of free or subsidized formula as safe and sustainable as possible.

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