

EVALUATING THE IMPLEMENTATION OF THE 2010 WHO/UNAIDS/UNFPA/UNICEF GUIDELINES ON HIV AND INFANT FEEDING

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*Report
(draft)*

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World Health organization

Department of Maternal, Newborn, Child and Adolescent
Health

1. Introduction

More and more women have access to antiretroviral drugs (ARVs) throughout their pregnancy and the breastfeeding period for their own health and to reduce the risk of mother-to-child HIV transmission. For example, in 2012 about 75% of HIV-infected pregnant women received ARVs, which represents 400 000 more women than those who received ARVs in 2009. In addition to newer ARV regimens, this increased coverage has contributed to significant further reductions in mother-to-child HIV transmission. However, in many high HIV prevalence countries today more than half of the children newly infected with HIV acquire it during the breastfeeding period.

WHO/UNAIDS/UNFPA/UNICEF Guidelines on HIV and Infant Feeding were last revised in 2010. For the first time, ARVs to prevent transmission through breastfeeding were recommended. Since then, WHO has updated recommendations on ARVs for the treatment of HIV-infected adults and children, and also the prevention of mother-to-child transmission of HIV (PMTCT). While these updated recommendations (2013) modified the ARV regimens to reduce transmission, especially peripartum transmission, the public health and programmatic implications were not fully translated into recommendations for infant and young child feeding in high HIV prevalence countries.

Implementation of the global recommendations on HIV and infant feeding at national level can be influenced in many ways. First, countries need to adopt the global recommendations into national frameworks including the allocation of budgets to support training, implementation and monitoring. Second, health workers need to have confidence in the recommendations and have the opportunity, in terms of time and other resources, to make them routine practice. Finally, mothers and communities need to understand changes in the interventions being offered and judge them to be of value in order to accept and adhere to them.

In 2012, UNICEF collected information on the implementation of the 2010 global recommendations to better understand the situation, improve technical assistance, and inform advocacy and resource mobilization.

The 2010 guidelines on HIV and infant feeding will be updated in 2015 using the GRADE process as outlined by the WHO Guideline Review Committee. This process includes evidence from published literature, such as determinants and factors which influence the implementation of the guidelines, and also considers the values and preferences of programme implementers and those directly affected by the guidelines (i.e. HIV-infected mothers).

For this reason, the WHO Department of Maternal, Newborn, Child and Adolescent Health (MCA), in collaboration with UNICEF, decided to evaluate experiences and challenges related to the implementation of the 2010 guidelines on HIV and infant feeding among three constituencies: national ministry of health (MoH) representatives, implementing partners and networks of HIV-infected mothers. This was carried out through interviews and an online survey to summarize progress made by the 22 UNAIDS priority countries (in sub-Saharan Africa plus India) and identify the main programmatic questions to be addressed by the Guideline Development Group in updating the 2010 guidelines on HIV and Infant Feeding.

2. Aims, objectives and expected outcomes

a. Overall Aim

The purpose of this evaluation is to assess the quality and extent of implementation of the 2010 global guidelines on HIV and infant feeding in the 22 countries included in the *UNAIDS Global Plan towards the Elimination of New HIV Infections among Children by 2015 and Keeping their Mothers Alive* in order to inform future guideline updates.

b. Primary Objectives

The primary objectives of the evaluation were to:

- Collect, compile and analyze information on HIV and infant feeding policies in the 22 countries included in the UNAIDS Global Plan;
- Collect, compile and analyze information on the quality and extent of implementation of national policies on HIV and infant feeding in these 22 priority countries;
- Document country challenges in the implementation of policies on HIV and infant feeding;
- Identify aspects of the 2010 global guidelines on HIV and infant feeding for potential review;
- Provide suggestions on areas to be considered in an upcoming review of WHO recommendations on this subject.

c. Secondary Objectives

The secondary objectives were to:

- Assess the progress made by each country on implementation of recommended interventions with respect to HIV and infant feeding;
- Collect information on capacity building/training conducted on recommended interventions with respect to HIV and infant feeding;
- Collect national data and tools on monitoring and evaluation on infant feeding by HIV-infected mothers and interventions to prevent postpartum transmission of HIV.

d. Expected Outcomes

The present report summarizes progress made by the 22 priority countries and the main programmatic questions to be addressed by the Guideline Development Group preparing to review the 2010 global guidelines on HIV and infant feeding.

3. Methods

a. Design

This evaluation was a desktop review using a combination of two methodologies: semi-directive phone interviews and electronic questionnaires.

Both a semi-directive guide for interviews and questionnaires for the on-line survey were organized in six parts corresponding to the main themes of interest for the present evaluation:

- Policy
- Programme implementation
- Capacity building
- Monitoring and evaluation
- Challenges
- Suggestions for review of global recommendations.

In the electronic survey, the last two themes (Challenges and Suggestions for review of global recommendations) were presented in the same section.

Piloting for both types of questionnaire was carried out with two countries for the phone interview and four colleagues/partners for the online questionnaire. The questionnaires were adapted subsequently and were available in English and translated into French.

➤ **The interviews** (national representatives with responsibility for HIV and infant feeding):

The semi-directive questionnaire was sent (through WHO regional/country offices) to national representatives with responsibility for HIV and infant feeding prior to the interview so that they could consider responses and collect information if needed. We suggested completing the questionnaire with a small group of MoH representatives (including for example the person responsible for HIV, PMTCT, nutrition and reproductive health), when possible. Once the questionnaire was completed and sent back to WHO (Geneva), a phone interview was organized to clarify any responses that were unclear or to obtain more details. In the majority of the countries, WHO national staff helped the MoH representative to prepare for the interview. Usually, WHO staff were also present during the interview. In a few cases, only WHO staff participated in the interview due to unavailability of MoH staff.

The interviews took place by phone. As the questionnaire was separated into six independent sections, the interview could have been carried out via more than one telephone call, but in fact it was not necessary.

The language for the interview was French for francophone countries and English for all others. One of the other countries needed translation from time to time during the interview.

- **The electronic survey** (implementing partners involved with supporting HIV and infant feeding programmes and networks that include HIV-infected mothers):

The electronic survey was available online both in English and French. Each participant could choose their preferred language.

The duration of the electronic survey was designed to be less than 30 minutes. Moreover, the participants were able to answer the survey anytime during four months when the survey was online. The participants had the option to complete the survey during one session or in a number of sessions as their answers were saved after each question. This method was intended to give respondents an opportunity to look for additional information if needed, as well as to respond to the questionnaire according to their schedule or if there were difficulties with internet access.

b. Study population

i. MoH representatives at national level

At country level, representatives of the MoH, including managers responsible for PMTCT and/or infant and young child (IYCF) programmes, were identified through WHO and UNICEF country/regional offices. . These representatives participated in the interview survey.

ii. Implementing partners and organizations working on HIV

Representatives of organizations implementing HIV-related programmes and therefore involved in HIV and infant feeding support were also invited to participate in an electronic survey (using Survey Monkey). The majority of them were members of the Inter-agency Task Team on the Prevention and Treatment of HIV Infection in Pregnant Women, Mothers and Children (IATT) and included:

- | | | | |
|--------------------------|----------------------|-----------------------|------------------|
| - ANECCA | - ANRS | - CHAI | - EGPAF |
| - ESTHER | - Clinton Foundation | - Global Fund | - ICAP |
| - MSF | - PEPFAR/USAID | - Save the Children | - UNAIDS |
| - UNICEF country offices | | - WHO country offices | - The World Bank |

c. Country selection

The 22 countries included in the UNAIDS Global Plan were all included in the evaluation, namely:

- | | | | |
|----------|-----------|------------|------------|
| - Angola | - Burundi | - Botswana | - Cameroon |
|----------|-----------|------------|------------|

- | | | |
|-------------------------------|------------------------------------|---------------|
| - Chad | - Democratic Republic of the Congo | - Ethiopia |
| - Ghana | - India | - Ivory Coast |
| - Lesotho | - Malawi | - Mozambique |
| - Nigeria | - South Africa | - Swaziland |
| - United Republic of Tanzania | - Zambia | - Zimbabwe |

d. Recruitment and consent process

➤ Interviews

Prior to the interviews, consent was requested through the questionnaire. At the beginning of the phone interview, participants were asked to confirm their informed consent.

➤ Electronic survey

The first page of the electronic survey gave a brief introduction to the project and the purpose of the questionnaire. The participants were requested to indicate consent for recording and analysis of the information that they shared. In the case of the respondent refusing to agree, they did not have access to the remaining parts of the survey questionnaire. An option was provided to speak with the study team to discuss reasons for refusal, with the opportunity to complete the online survey after the discussion or to be interviewed by phone.

e. Ethical considerations

While the primary purpose of the evaluation was to inform the updating of the global guidelines, the data may be submitted for publication in a peer-reviewed journal.

The interviews were not anonymous in that the interviewer knew the identity and role of the respondents. However, all questions relate to implementation of national or local health programmes and no personal information about the person being interviewed was collected other than their professional capacity.

The online survey was also not anonymous as the name of the person, position and organization was requested. However, in the analysis, the data were not related to an individual.

Finally, in the analysis and in the present report, all identifiers in terms of their sources were removed.

Moreover, we requested consent in the first part of the questionnaire that was sent through email. Verbal confirmation of consent before starting the interviews was requested. Consent before

starting the online survey was also requested. Individuals who did not provide consent for the online survey did not have access to the questionnaire and were given the option to contact our team directly to voice their concerns.

On the 29th November 2014 a cover letter was addressed to the Ethics Review Committee to present the protocol and the questionnaires for the evaluation. The ethical concerns were highlighted, explaining that consent will be requested before starting the interviews and at the beginning of the online survey. Moreover all data in the analysis and final report will have identifiers removed. The decision to seek to publish the data in a peer-reviewed journal was also emphasized.

In the following weeks, the Ethics Review Committee analyzed the request and informed us about their decision to give an exemption regarding our study as the data collected will represent the views of health workers in their professional capacity.

4. Limitations

The present evaluation is limited to a desktop exercise, and therefore it has not been possible to complete and cross check the national level information with observations and information at field level. Neither the health staff working in the health facilities (e.g. midwives, nurses, doctors, community health workers, community midwives, etc.) nor the mothers and other people with a significant influence on infant feeding practices (fathers, grandmothers, etc.) were interviewed. For the same reasons, observations of practices at health facilities and at home were not possible.

To address this limitation, we had planned an additional exercise to evaluate the progress and challenges at field level through mothers and health staff on the ground. Unfortunately, it was not possible to carry this out.

There is also a risk of non-respondents (or uncompleted questionnaires), especially for the online survey. The number of non respondents also limits the accuracy and details of the information.

5. Results

A total of 22 countries were invited to participate in the survey, and the information was collected from December 2014 to September 2015. Unfortunately, despite the perseverance of both WHO Geneva and the Regional Office for Africa, one of the countries never replied to repeated requests. The interviews with the MoH took between one hour and two and one half hours, not counting the preparation beforehand.

The following information presents the results of the survey for the 21 countries that responded. Two to six people per country participated in answering the questionnaire. In addition to MoH staff (two to four per country), one or two WHO staff were present, except in three countries. In two countries, one or two partner representatives also participated in completing the questionnaire.

In all countries there was at least one person who was a specialist on HIV and/or PMTCT. In 19 countries there was also at least one nutrition and/or IYCF person and in two countries there was one person specialized in reproductive and maternal health.

The phone discussions were carried out with at least one of the persons who participated in completing the questionnaire.

The results from the information collected are presented below.

A. Policy

1. Documents

All countries had at least a protocol or guideline and a training document. In four countries there was a dedicated policy in addition to the protocol or guideline and training document.

HIV and infant feeding recommendations were included in HIV/PMTCT documents in all countries except for one.

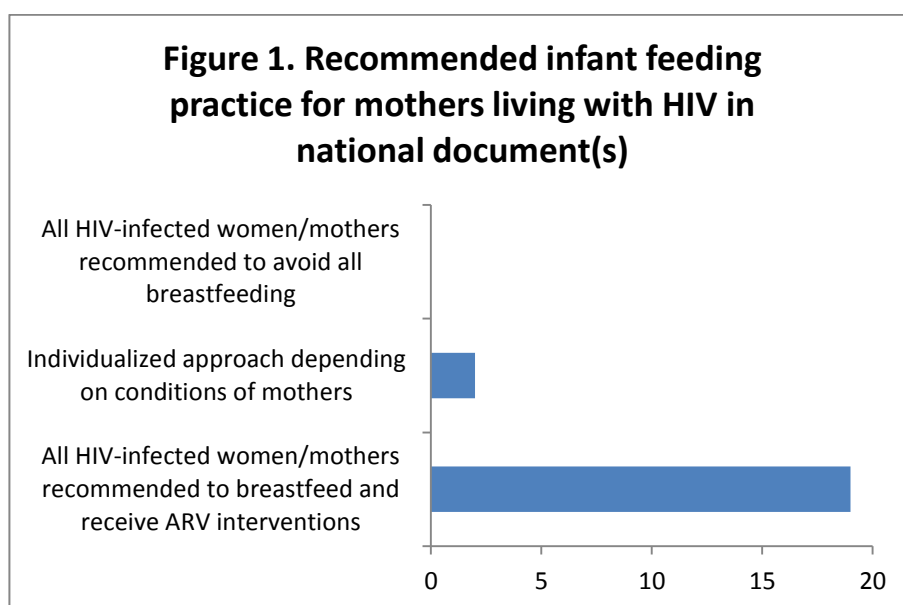
As shown in Table 1, these recommendations were also included in IYCF documents for 18 countries and in national nutrition policies for 15 countries. None of the countries had a stand-alone document on HIV and infant feeding.

Table 1. Type of country guidance on HIV and infant feeding			
Stand-alone document	Integrated document	into IYCF	Integrated HIV/PMTCT document into nutrition document
0	18		20
			15

The last national updates on HIV and infant feeding were carried out after the 2010 guidelines in all countries except one.

2. ARVs and infant feeding practices

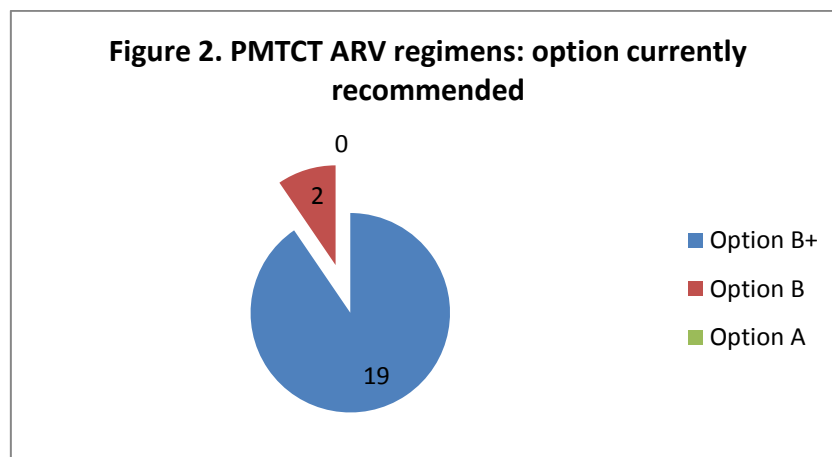
Regarding infant feeding practices for mothers with HIV, the majority of countries (19 out of 21) recommended breastfeeding (with ARV interventions) for all HIV-infected mothers, and only two countries had an individualized approach depending on the mother's condition (Figure 1). None of the countries recommended avoiding all breastfeeding for HIV-infected mothers.



Option B+ (maternal triple ARV lifelong treatment) is recommended in 19 countries. Two countries recommending option B+ specified that part of the country is still on option A as they are on the way to scaling up to option B+ (see Figure 2).

Two countries recommended option B (maternal triple ARV drugs antenatally and for breastfeeding duration). One of these countries highlighted that part of the country has begun implementing option B+.

Sometimes implementation of Option B+ started before the complete revision of national guidelines, so it was not always clear from the guideline documents what is actually recommended.



In all countries using option B+ or option B, the drugs recommended are tenofovir disoproxil fumarate (TDF), lamivudine/emtricitabine (3TC/FTC) and efavirenz (EFV). Four countries used as alternatives: zidovudine, lamivudine and lopinavir/ritonavir (Lp/r) or zidovudine (AZT), lamivudine and nevirapine (NVP). One of the countries gave a third alternative: zAZT, lamivudine and abacavir.

In one of the countries where part is still using option A, the drugs used are: AZT at 14 weeks gestation or as soon as possible; AZT, 3TC and NVP during delivery; and AZT with 3TC during seven days after delivery. In the other place where part of the country is still using option A (Mozambique), both AZT and NVP are used.

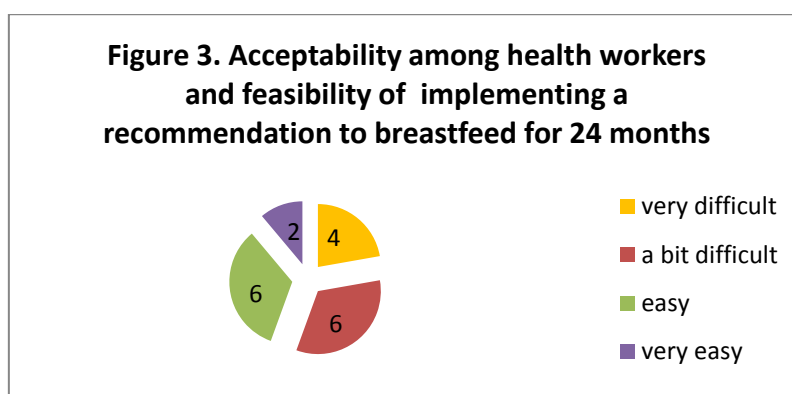
The last revisions of guidelines on maternal ARV regimens were done in 2012 in one country, and between 2013 and 2015 for the other countries. One of the countries could not specify when the last update was carried out.

Exclusive breastfeeding until 6 months is recommended in all countries. In 18 countries the infant feeding practices recommended after 6 months for breastfeeding mothers are to continue breastfeeding from 6 to 12 months; two countries recommend continued breastfeeding from 6 to 24 months. One country promotes exclusive breastfeeding until 6 months and infant formula from 6 to 12 months.

In countries where the recommendations are based on individualized approaches, for the mother who chooses not to breastfeed the recommended infant feeding practices are: infant formula from 0 to 12 months (two countries) or modified animal's milk from 0 to 12 months (one country).

If the infant is known to be HIV positive, the recommendations are the same as for the HIV-negative or infant of unknown status in seven countries. Eleven countries promote continued breastfeeding until 24 months instead of 12 months or instead of infant formula until 12 months. In one country there are no recommendations for this specific case.

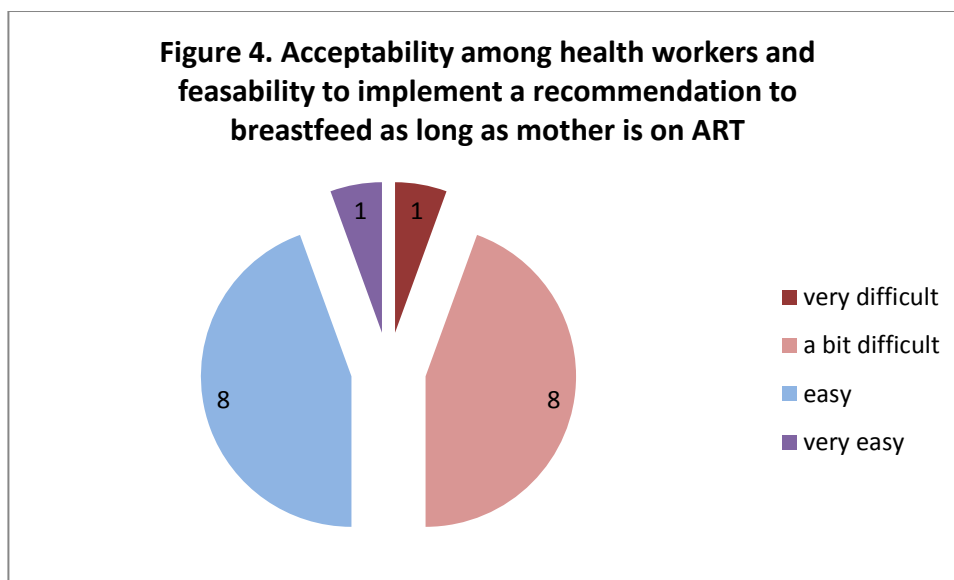
The recommendation for HIV-positive mothers to breastfeed for 24 months is already being implemented in two countries in some facilities. The respondents said that they are facing no major difficulties in implementation except ones linked with training (with regard to the time and resources required). For the other countries, the acceptability among health workers and the feasibility of implementation has been judged to be very difficult or a bit difficult in half of the countries, and easy or very easy in the other half of the countries (see Figure 3). One country did not know what to expect.



The main fear regarding the difficulties of acceptability and ease of implementation is resistance from health workers and/or mothers concerning HIV transmission risk, especially as compliance with ARVs can be an issue. Some of them are already uncomfortable with breastfeeding beyond 6 months, stating “The longer the infant stays on breastfeeding the higher the risk of transmission is”. Scientific evidence will be needed to convince them. Other obstacles mentioned include: the investment needed to make any changes in recommendations (e.g. training, update of guidelines and tools; the fact that children often stay with grandparents when the mother has to go back to work; and even for non HIV-infected mothers, the average age of breastfeeding is usually lower than 24 months. The countries which judge that promoting breastfeeding for 24 months would be easy highlight the fact that it is already done for non HIV-infected mothers, and stressed the importance of evidence, training and adherence checks.

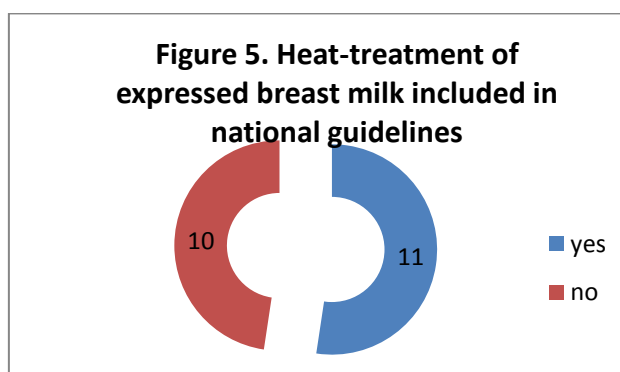
The recommendation for HIV-infected mothers to breastfeed as long as the mother is on antiretroviral therapy (ART) is already being implemented in six countries (see Figure 4). One of these countries could not name any difficulties yet as it was just starting, and the other countries did not highlight any particular issues. They classified implementation as easy or very easy. For the countries

where implementation has not begun, the acceptability among health workers and the feasibility of implementation was judged as very difficult or a bit difficult. None expected implementation to be very easy. One country stated it did not know what to expect.



The two main fears regarding difficulties of acceptability and implementation are again the transmission risk (and the observance that "stopping breast-milk ceases HIV exposure") and the fact that the recommendation is too vague (no clear age, unclear when to stop especially when the mothers are on option B+).

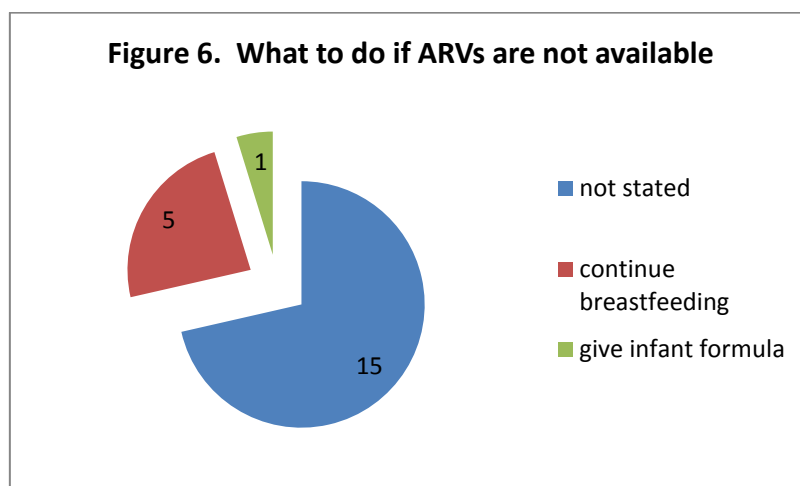
Heat-treatment of expressed breast milk is included as an option in the guidelines of half of the countries (see Figure 5).



The circumstances mentioned in the national guidelines for heat-treatment of expressed breast milk are:

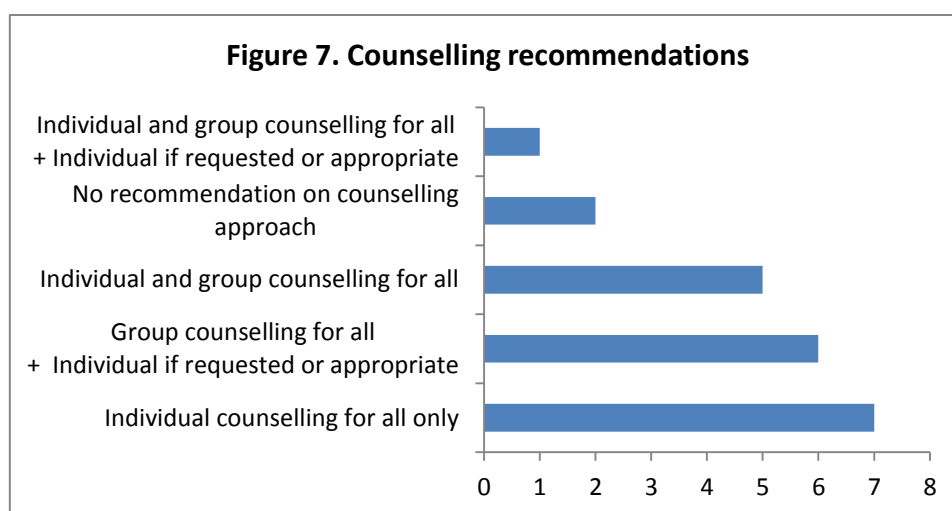
- when the mother is unwell and temporarily unable to breastfeed or has a temporary breast health problem such as mastitis (10 out of 11 countries);
- when the infant is born with low birth weight or is otherwise ill in the neonatal period and unable to breastfeed (6);
- to assist mothers to stop breastfeeding (4);
- if ARVs are temporarily not available (2);
- “if the mother is unable to breastfeed for whatever reason” (1).

The majority of the countries do not state in their national documents what to recommend in the event that ARVs are not available or there is an interruption in supply (Figure 6).



3. Counselling

Regarding the approach to counselling HIV-infected mothers on infant feeding, the recommendations in the national documents are shown in Figure 7.



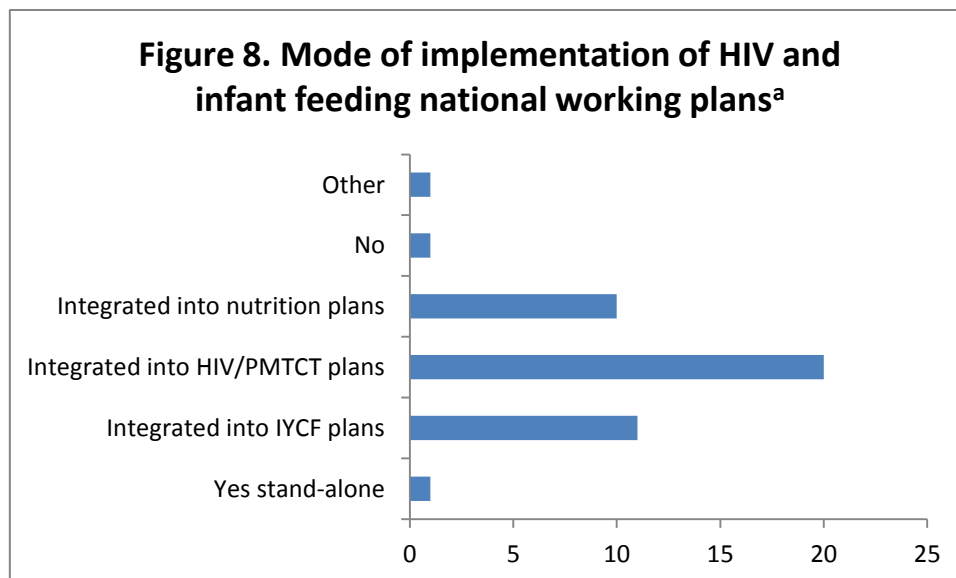
Eleven out of 21 countries do not plan to review or update their current national documents on HIV and infant feeding unless new international recommendations are issued. Eight countries are currently reviewing or planning to review some of their documents this year (2015), while representatives from two countries did not know whether an update is planned.

The international Code of Marketing of Breast-milk Substitutes is adhered to in 16 countries through legislation and in 1 country through voluntarily measures. Four countries stated it was not being implemented.

B. Programme implementation

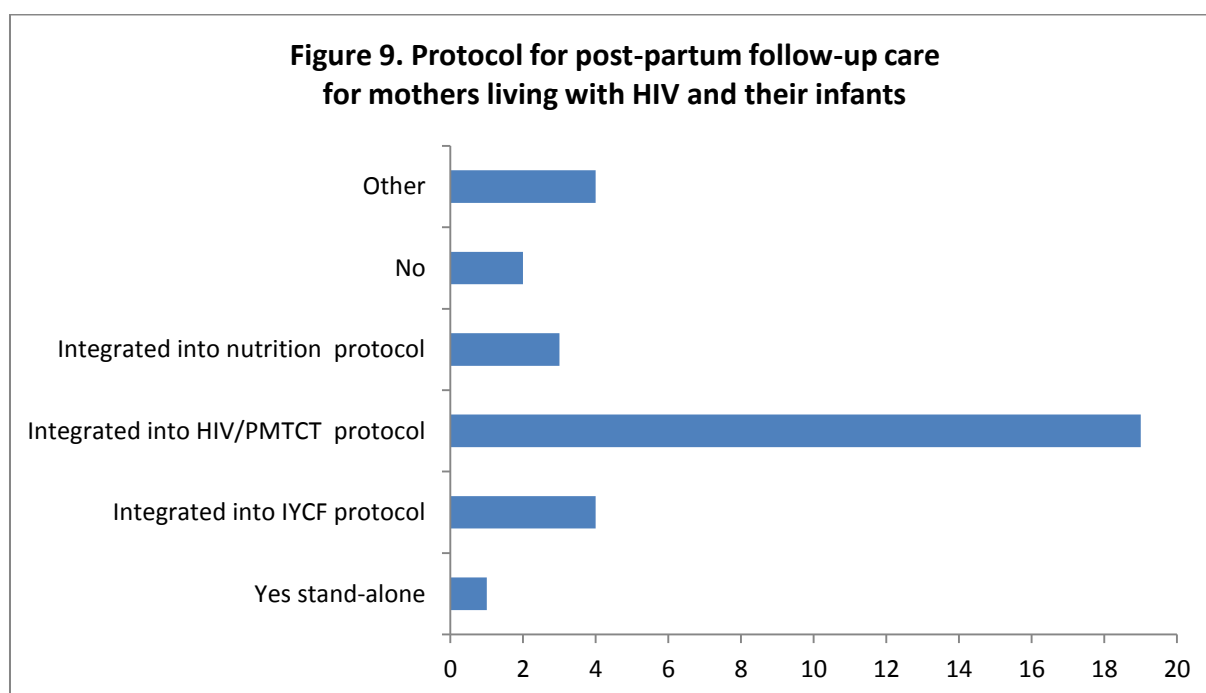
The participants were asked whether there is a technical advisory or similar group actively involved with HIV and infant feeding issues. In three of the countries there is none, while two have a dedicated HIV and infant feeding technical advisory/working group. In the other countries, the topic is part of one or several technical advisory/working groups: seven of 21 include infant feeding in the HIV group, 14 in the PMTCT group, ten in the IYCF group, eight in the nutrition group and four others in groups such as HIV paediatric management, maternal, infant and young child nutrition, and the national task team for elimination of MTCT of HIV, and the national PMTCT subcommittee

Figure 8 shows how national working plans on HIV and infant feeding are being implemented. All the working plans have been updated since 2010. Three of these plans are not costed, 16 are fully or partially costed, but none are fully funded.

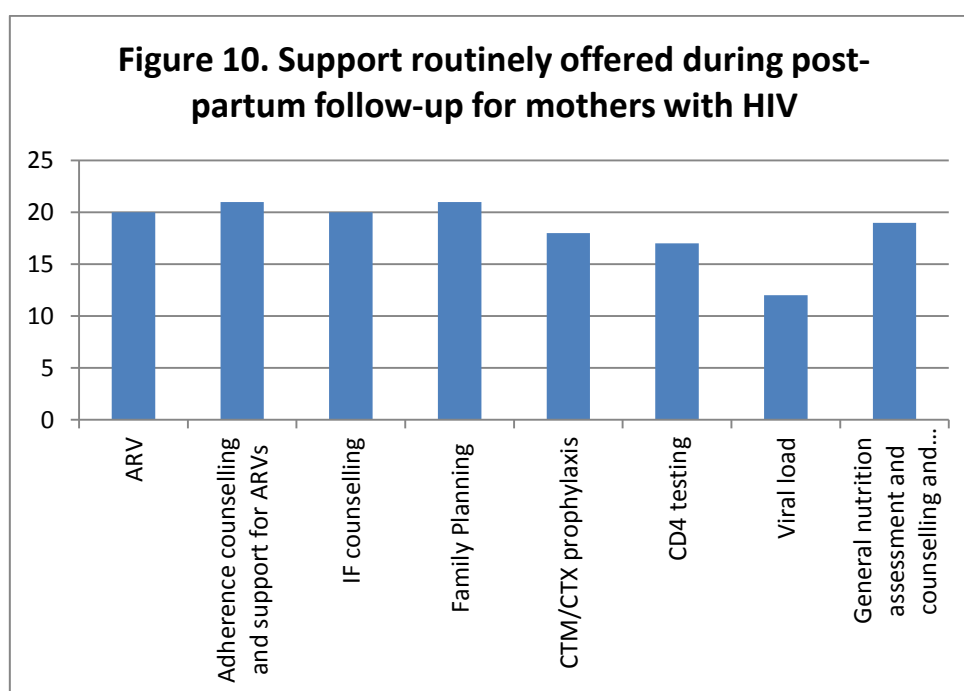


^aOther is an HIV pediatric management plan (which is in addition to the national HIV working plan).

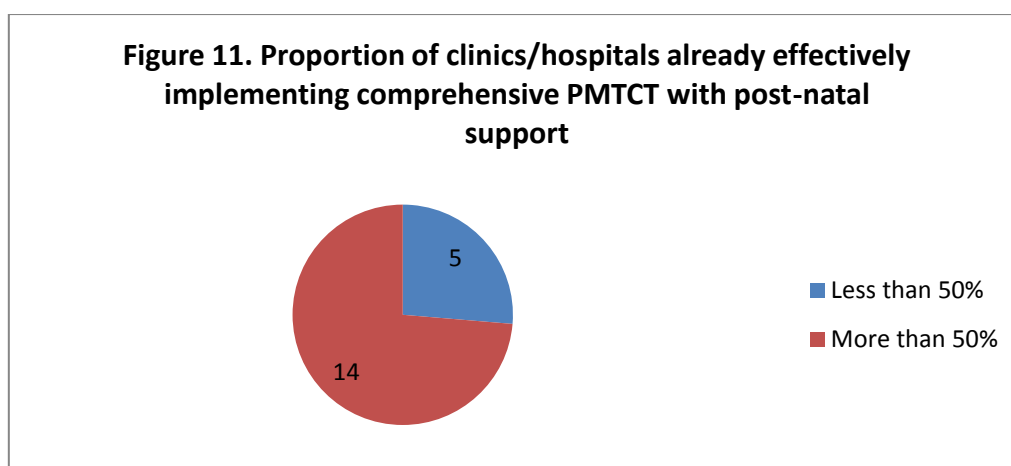
Figure 9 summarizes the responses to the question: “Is there a protocol for post-partum follow-up care for mothers living with HIV and their infants, either dedicated or integrated in other protocols?”



Among the types of support routinely offered during post-partum follow-up for mothers living with HIV, assessing the viral load is the least frequently included. However, more than 50% of the countries reported offering the test (see Figure 10).



According to the respondents, in three quarters of the countries, over 50% of clinics/hospitals are already effectively implementing comprehensive PMTCT (including ARVs) with postnatal support (Figure 11).



According to respondents, the current national protocol with respect to infant ARV prophylaxis includes:

- NVP for 6 weeks (15 of 21)

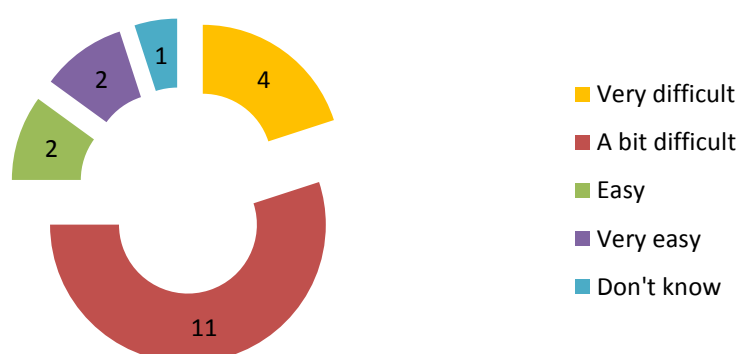
- NVP for 12 weeks (1)
- NVP+AZT for 4 weeks (1)
- NVP at birth then AZT and lamuvidine from birth to day 7 (1)
- TDF-3TC-EFV (1)
- AZT syrup for six weeks, but change ARVs if infant confirmed as HIV positive (1)
- NVP for 1 week after breastfeeding cessation (for Option A) (1)
- Don't know (1).

With respect to infant ARV prophylaxis, the participants mentioned the following special recommendations or other exceptions to the routine protocol:

- AZT for children with reaction to NVP or if stock-out (4);
- AZT + lamuvidine if the mother is screened during delivery or 48 hours after delivery or if stock-out of NVP;
- if the infant has symptoms of HIV: stop prophylaxis of single ARV and start triple ARVs;
- if the infant is anaemic, he/she is given NVP instead of AZT syrup. If not anaemic, the infant is given AZT syrup;
- HIV1: give NVP syrup during 12 weeks, if maternal ART was initiated during the antenatal/postnatal period and has been taken for <24 weeks;
- ARV prophylaxis during 4 weeks for children with mothers who follow PMTCT for less than 1 month;
- NVP can be stopped 4 weeks after the mother's viral load is <20 copies/ml or 4 weeks after cessation of breastfeeding, whichever is sooner.
- NVP single dose during 6 months if mother is seen after 34 weeks gestation;
- Extended NVP for 12 weeks if :
 - Mother did not receive any ART before or during delivery and tests HIV-positive >72 hours post-delivery;
 - Mother newly diagnosed HIV-positive within 72 hours of delivery;
 - Mother started ART less than 4 weeks prior to delivery.
- HIV-exposed infants who are not delivered at health facilities can receive NVP prophylaxis between birth and four weeks of age.
- Don't know (3)
- No exceptions (7).

One country is currently implementing virological testing (PCR) at birth and considered the feasibility as easy. The other countries expect implementation to be very difficult or a bit difficult as shown in Figure 12.

Figure 12. Feasibility of implementing infant HIV virological testing (PCR) at birth



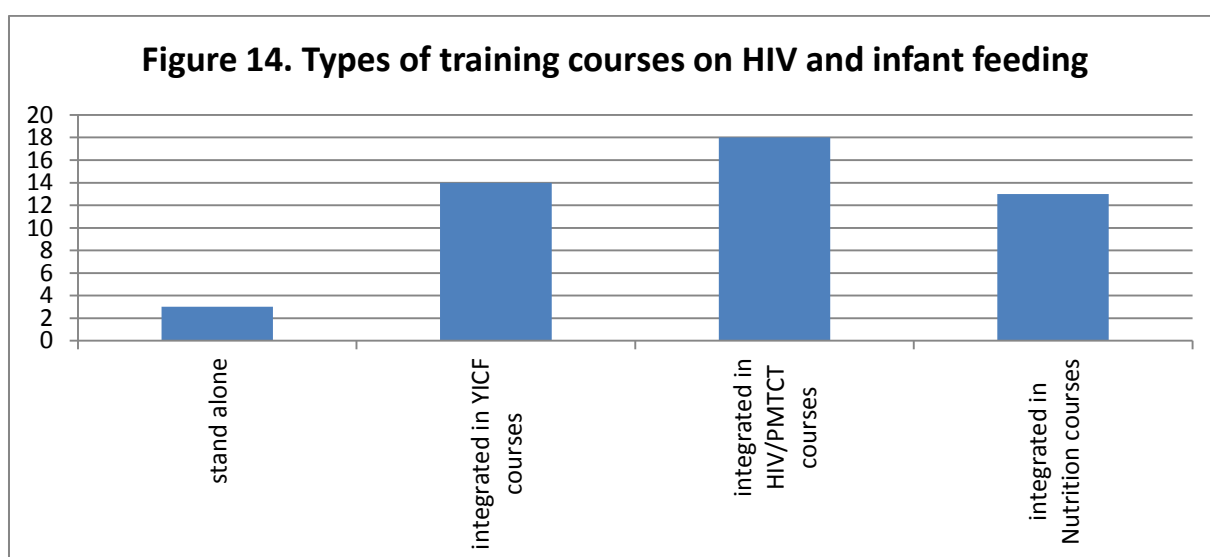
Eight countries are currently implementing infant HIV testing at routine immunization and growth monitoring clinics, and considered it easy. The other countries expect implementation to be predominantly very difficult or a bit difficult as shown in Figure 13.

Figure 13. Feasibility of implementing infant HIV testing at routine immunization and growth monitoring clinics



C. Capacity building

All 21 countries surveyed have carried out training courses on HIV and infant feeding, either stand-alone ones or integrated in IYCF, HIV/PMTCT and/or nutrition courses (Figure 14).



The courses were updated in all countries after 2010 (except for one country which was not sure of the date of the last update). The last training courses took place less than 1 year ago in almost all countries (18 of 21), 1 to 2 years ago (2) or 2 to 4 years ago (1).

The types of health workers who attended the courses including HIV and infant feeding are listed below with the frequency of courses:

Table 2. Type of health workers trained and frequency of training courses

Types of health workers who attended training courses related to HIV and infant feeding	Frequently	Only occasionally	Never, not applicable or don't know
General doctors	5	15	1
HIV Specialized doctors	4	10	7
General nurses	12	9	0
HIV Specialized Nurses	5	5	11
Midwives	9	11	1
Public/Community Health nurses	6	12	3
Nutrition officers	11	8	2
Other MOH staff	5	12	4
Community health workers	6	14	1

Health staff of nongovernmental organizations / United Nations / Associations	7	12	3
Others*	2	4	0

*In the other category, the following were mentioned: pharmacist, laboratory personnel, specialized doctors as gynecologist and pediatrician, psychosocial counsellors and village health team.

Heat treatment of expressed breast milk is included in the training of health workers in about half of the countries (11).

D. Monitoring and evaluation

The routine monitoring and evaluation (M&E) system for collecting breastfeeding practices information is usually integrated into other M&E systems as described in Table 3.

Table 3. Types of M&E systems on breastfeeding practices

HIV and infant feeding M&E system	For all mothers	For HIV-positive mothers
Stand-alone	0	0
Integrated into IYCF M&E system	3	2
Integrated into HIV care /PMTCT M&E system	-	14
Integrated into nutrition M&E system	6	5
Integrated into child health/welfare M&E system	8	8
Integrated in postnatal care M&E system	7	6
Others	5	2
None or don't know	1	1

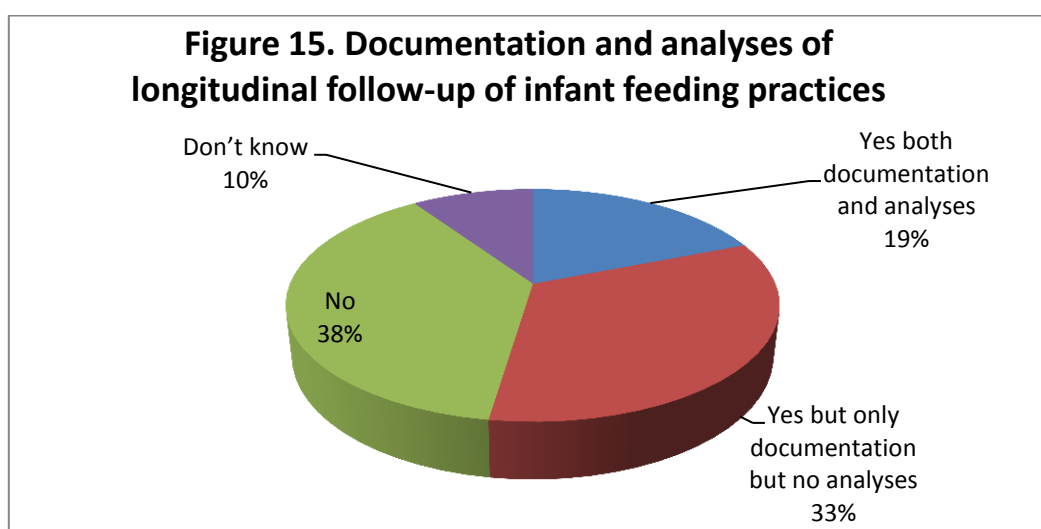
This routine information on breastfeeding practices is documented for all countries (except for one country which was unsure if the data are collected or not) in postnatal, Integrated Management of Childhood Illness, or child health registers (including PMTCT/HIV, maternity and baby-mother follow-up care system registers). Four countries also collect it in CMAM registers.

The indicators collected in the registers include:

- Early breastfeeding (9 of 21)
- Exclusive breastfeeding (16)
- Replacement feeding (12)
- Other: 2 of 21 countries mentioned duration of breastfeeding and introduction of complementary food.

Three countries could not specify which indicators are collected.

The longitudinal follow-up of infant feeding practices is rarely analyzed, and only documented in 50% of the countries (Figure 15).

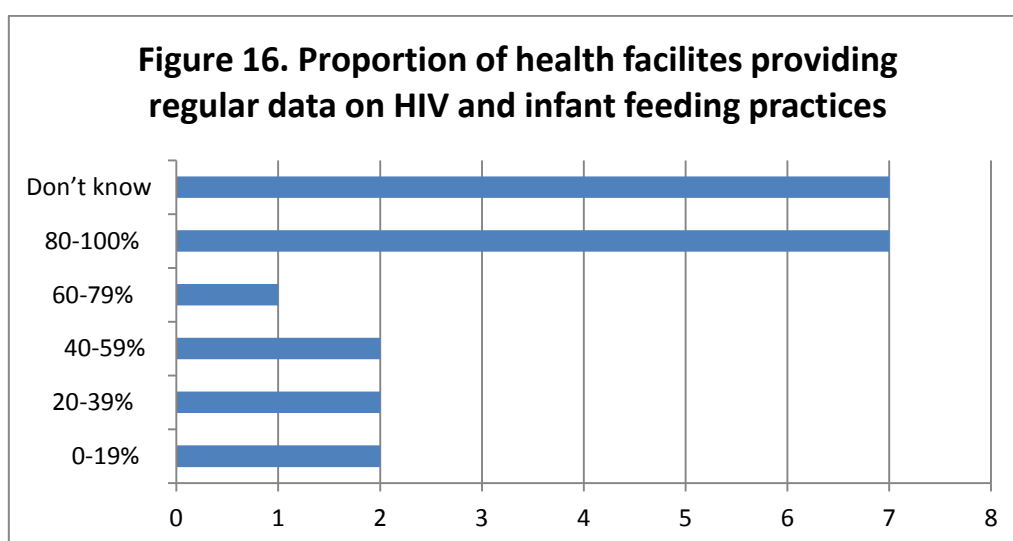


The majority of the countries disaggregate infant feeding practices data as shown in Table 4:

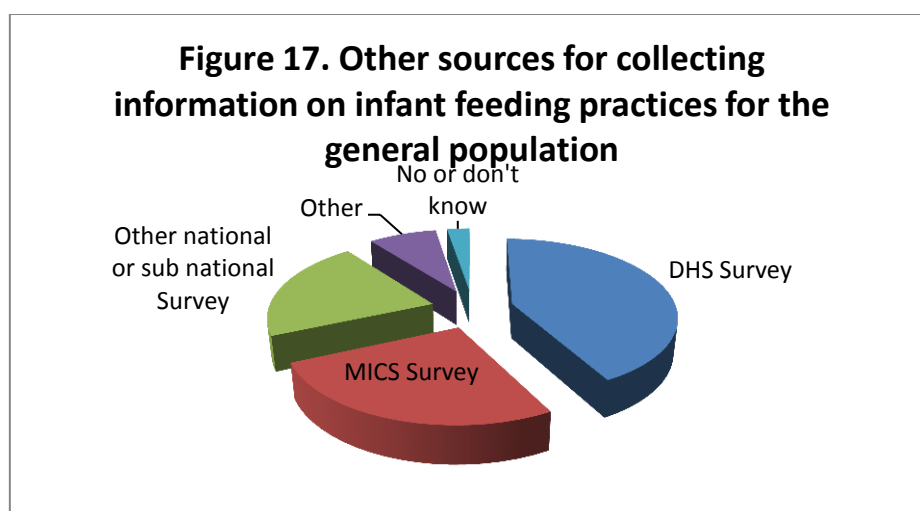
Table 4. Categories for disaggregation of infant feeding practices data

By HIV status of the child	By age group	By sex	By infant feeding practice	No or don't know
8	12	4	10	6

Only one third of the countries receive regular data from at least 80% of their facilities, while another one third receive regular data from less than half of the facilities, and the remaining countries did not know what the proportion was (see Figure 16).



Except for one country, all have other sources for collecting information on infant feeding practices as presented in Figure 17. The “other” category includes local surveys carried out by partners in a specific area for a specific purpose as research or programme evaluation.



E. Challenges

The main challenges, quoted by various countries, were quite general:

- Lack of funding
- Socio-cultural barriers (e.g. stigmatisation, beliefs, practices as non EBF, disclosure, empowerment of women)
- Lack of knowledge (e.g. of health workers, of mothers, due to changes in recommendations, lack of training)
- Lack of training of health care workers on new policies
- Lack of resources (e.g. human resources, equipment, shortage of test kits, ARVs)
- Weak M&E system
- Adherence to ARVs
- Follow-up of patients

Some more specific changes were also mentioned several times:

- Women who go back to work and cannot continue exclusive breastfeeding (usually after 2 months)
- Choice of no breastfeeding even without AFASS¹ conditions
- Economic barriers at family level to buy infant formula.

Sometimes the fact that health care workers do not understand or do not support new policies was also mentioned, but the main reason seems to be linked with lack of knowledge.

During the discussion, respondents stated that health care workers are not all comfortable with the HIV and infant feeding recommendations, especially continuing breastfeeding after exclusive breastfeeding, due to the risk of transmission. Some of them also said that to continue breastfeeding while giving other foods contradicts what they explained to the mother regarding exclusive breastfeeding in the first months (e.g. mothers have to exclusively breastfeed from birth to 6 months to avoid transmission risk).

Two countries cited a lack of government leadership as a challenge.

Lack of coordination between HIV, PMTCT, nutrition, IYCF and reproductive health at programme level and in clinics was also highlighted.

F. Suggestions for the review of WHO recommendations

Some of the suggestions show a lack of knowledge regarding what is recommended in the 2010 global HIV and infant feeding guidelines, as MOH staff are more aware of the contents of their

¹ AFASS refers to “acceptable, feasible, affordable, sustainable and safe”, conditions set out in previous HIV and infant feeding guidelines to help a mother decide whether she should replacement feed. It is no longer included in guidelines.

national documents. Therefore, some of the following suggestions are not consistent with the 2010 guidelines.

1. What was helpful in the 2010 global guidelines on HIV and Infant feeding:

Globally the 2010 HIV and Infant feeding guidelines have been useful to develop national documents. The following specific points were mentioned:

- Good to categorise the recommendations (with level of evidence);
- Clear statements;
- Guidance on exclusive breastfeeding was well explained and emphasized. There were too many options before. Better to promote exclusive breastfeeding for 6 months than 3 months;
- Extension of breastfeeding duration from 6 months previously to 12 months in current guidelines. It reduces stigmatization and is programmatically easier to implement;
- Removal of abrupt cessation of breastfeeding at 6 months as it was very difficult;
- Strong evidence supporting breastfeeding for HIV-positive women in the first 6 months of baby's life. It helped to increase the rate of breastfeeding among them;
- Breastfeeding even if no ARVs;
- Emphasis on infant feeding counselling and adherence counselling (more details);
- Option B+ is easy to implement and breastfeeding recommendations are easily understood and adhered to;
- Protection during breastfeeding with the provision of ARV prophylaxis to the infant or ART for mothers eligible for their own health;
- Introduction of early infant diagnosis for HIV-exposed infants from 4-6 weeks after birth;
- ARVs to make infant feeding safer;
- More effective regimen combinations for HIV-positive pregnant women;
- To have infant-friendly preparation of NVP.

2. What was difficult or confusing in the 2010 HIV and Infant feeding guidelines?

- What to do when a mother chooses infant formula even if she does not meet AFASS criteria (we have no choice but to support them);
- What to do after 12 months if AFASS criteria are not fulfilled and what are the risks;
- What are the directives regarding food for HIV-positive children (after 6 months): needs of HIV-infected children are different than for non infected with regard to calories, quantity of proteins, lipids, micronutrient needs, etc.; what type of food/nutrients should be prioritized for them;
- Over what period of time to stop breastfeeding is not specified;
- When it is appropriate to propose interim feeding strategies such as expressed breast milk;
- Details, explanations and rationale are missing in the guidance on continuing breastfeeding;
- How to determine a safe and adequate diet;
- How to support mothers who opt out of exclusive breastfeeding;

- How to stop breastfeeding, when, what to use;
- How to best support working mothers and mothers who cannot breastfeed on demand;
- Unclear if breastfeeding should stop at 12 months.

3. Parts of the 2010 HIV and Infant feeding guidelines which are the most important to review:

The importance of strong evidence on which to base future recommendations is critical, in particular regarding the safety and the added value of breastfeeding up to 12 months and after 12 months.

The following were proposed:

- The fourth recommendation of the 2010 guidelines states that "Home-modified animal milk is not recommended as a replacement food in the first six months of life". It was suggested to remove "in the first 6 months", as it is not recommended at all.
At the same time, another country suggested recommending home-modified animal milk rather than commercial infant formula feeds in the first six months if exclusive replacement feeding is inevitable.
- To promote continued breastfeeding until 24 months, especially when option B+ is implemented (with strong scientific evidence).
- To put an emphasis on the difference between recommendations for the HIV-positive child and the HIV-negative child regarding breastfeeding.
- To give operational guidance to treat the whole family (husband, wife, children) in the same facility (as it would be easier).
- To provide guidance on how to support mothers who cannot breastfeed on demand (as working mothers usually go back to work after 2 months).
- To specify for how long women can continue breastfeeding in a situation of shortages of ARVs and what to do and how afterwards.
- To explore more effective ARVs/fixed dose combinations for breastfeeding communities (give doses less often which cover longer time periods).
- To recommend DNA-PCR testing at birth.
- To clarify when it is appropriate to use interim feeding strategies such as expressed breast milk.
- To provide guidance on how to deal with financial issues, depending on different situations (how to obtain more funds, how to cope when funds are not sufficient, etc.).
- To consider extending the period of breastfeeding to 24 months (to avoid malnutrition and as transmission risk is low).
- To bring back AFASS or a similar concept in the guidelines as it was easier to understand, with guidance when AFASS criteria are not met (and no breastfeeding).
- To give guidance on how best to introduce solid food (complementary feeding): what to give, over what period of time, how to give it (should it be one food at a time, etc.).
- To outline feeding options for the sickly neonate or preterm and give clear guidance on what to do if the baby cannot suckle and if the mother cannot breastfeed even temporarily.
- To give more details regarding counseling sessions and job aids.
- To provide guidance on how to improve IYCF practices at facility, community and patient level.

- To give more guidance on the monitoring and evaluation aspects of IYCF including analysis and utilization of data.
- To provide guidance of training packages and processes for IYCF.

6. Conclusion

This evaluation exercise has served to identify the degree of implementation of the 2010 HIV and infant feeding guidelines in 21 priority countries. While implementation has been somewhat irregular across countries, progress is being made.

Some issues in the current guidance appear to be unclear. In some cases, other publications are available that clarify, e.g. issues around complementary feeding and supporting working women, but the respondents either were not aware of them, or did not consider them relevant for HIV-positive women.

The provision of more scientific evidence is an important point which would help to convince health staff when any new recommendations are introduced, especially with regards to strong scientific evidence for continuing breastfeeding after 6 months of age.

The suggestions on what content was confusing in the 2010 guidelines and what should be reviewed will serve in finalizing the 2015 guidance.

7. Annexes

- i. **Semi-directive Guideline for Interviews**
- ii. **Questionnaire for online survey**
- iii. **Ethics Review Committee approval**