Attitudes Towards Exclusive Breastfeeding and Other Infant Feeding Options—A Study from Abidjan, Côte d’Ivoire

by Emmanuela A. Yeo, Laurence Béquet, Didier K. Ekouévi, and Michael Krawinkel

a Institute of Nutritional Sciences, Justus-Liebig-University, Giessen, Germany
b Projet ANRS Ditramé Plus, Programme PACCI, Abidjan, Côte d’Ivoire

Summary

The HIV/AIDS-pandemic causes many problems for the most affected societies and their health care systems. One of these is the ‘parent to child transmission’ (PTCT) through breastmilk and its prevention (PPTCT). As economic and hygienic conditions do not always assure safe replacement feeding in developing countries, a WHO/UNAIDS/UNICEF-expert panel proposed methods to reduce the risk of PTCT but to use breastmilk for infant feeding. The study presented here aimed at identifying the expected acceptance of such a concept by addressing the attitudes of women in Abidjan, Ivory Coast. Interviews were performed with 150 mothers and 60 pregnant women. The vast majority regarded breastfeeding as the appropriate method of infant feeding, although the idea of exclusive breastfeeding was not well accepted. Water, especially, was felt to be a necessary supplement. In case of a suggested HIV-infection of the mother, 74 per cent of the women voted for weaning after 3 months. Eighty-three per cent accepted the exclusive use of breastmilk substitutes from birth. Seventy-six per cent were ready to boil their milk for pasteurization. Only 37 per cent considered a wet-nurse to breastfeed their child. As mixed breastfeeding implies a highest risk of PTCT of HIV, the most favoured option—exclusive breastfeeding and early weaning—requires some effort to convince women that breastmilk is a sufficient source of nutrients, fluid and energy for their child and that this feeding should preferably be practised up to 6 months of age. For affluent women, breastmilk substitutes can also be considered as a means of PPTCT in overall resource-poor countries. For the majority of women, there is no real alternative to breastfeeding and to the use of breastmilk for which appropriate technologies of PPTCT are to be developed with respect to national, local and household specifications.

Introduction

The benefits of breastfeeding regarding nutrition, immunological protection and child spacing have been well documented. These benefits are particularly important and life-saving in developing countries, where economic and hygienic conditions do not always assure safe replacement feeding. Thus it is good that breastfeeding is widely practised by women in African countries. Unfortunately, Africa is also the continent where HIV causes the most damage in terms of morbidity and mortality. Since the discovery that HIV is transmitted through breastmilk this causes a real dilemma for HIV-infected mothers: breastfeed and take the risk of a contamination of the infant with all its consequences, or do not breastfeed and leave the child unprotected against infections and nutritional deficiencies.

Faced with this problem, WHO, UNICEF and UNAIDS made a range of proposals for infant feeding in the case of maternal HIV infection. They suggested that women be counselled and choose among different options: exclusive breastfeeding for 6 months, early weaning, pasteurization of breast milk, wet-nursing, and replacement feeding. Some of these options have been tested in terms of efficiency for reducing the ‘parent to child transmission’ (PTCT). But their requirement to be adapted to different environments also needs to be investigated. Therefore, the relevant UN organizations recommend testing the feasibility and the appropriateness of the different options before introducing them into different areas.

The present study aimed at determining the potential acceptability of the different feeding options in the specific context of Abidjan in Côte d’Ivoire.

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Correspondence: Michael B. Krawinkel, Institute of Nutritional Sciences, Wilhelmstrasse 20, D-35392 Giessen, Germany.
E-mail: michael.krawinkel@ernaehrung.uni-giessen.de

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It was achieved with the support of DITRAME PLUS, a research project aiming at evaluating the effectiveness of a package of interventions to reduce mother-to-child transmission in Abidjan.

**Materials and Methods**

A cross-sectional study was conducted in May 2001 in three health centres of Abidjan. It was addressed to mothers and pregnant women who attended the centres for a prenatal consultation or for weighing or vaccinating their children. The women were interviewed using a structured questionnaire including open or semi-open questions. Data were collected on socioeconomic characteristics of the women's households; knowledge about breastfeeding (BF) and exclusive breastfeeding (EBF); attitudes towards EBF; and acceptance of alternatives to BF in case of a transmissible disease by the mother.

The data were recording with Epi-Info Version 6.0 and analysed with the Statistical Package for Social Sciences (SPSS for Windows Version 10.0).

**Results**

*Socioeconomic characteristics*

Two hundred and ten women (150 mothers and 60 pregnant women) were surveyed. The median age was 24 years (range 20–29). The socioeconomic characteristics of the respondents are given in Table 1.

**Knowledge about breastfeeding and exclusive breastfeeding**

Women were asked if breastmilk or bottled milk is preferable for an infant. Ninety per cent of the women designated breastmilk as the best food, while 1 per cent thought artificial milk was better and 9 per cent were undecided. The most commonly indicated reasons for designating breastmilk were: ‘breastmilk is rich in nutrients’, ‘it protects against infections’, ‘it contains vitamins’, ‘it is free of charge’, and ‘the bottle is bad’.

Among the women, 58 per cent had heard about exclusive breastfeeding, mostly through health workers (47 per cent) but also through advertisement (16 per cent), friends (3 per cent), relatives (2 per cent) or literature/school (1 per cent). But, only 33 per cent of the interviewed women knew a correct definition of exclusive breastfeeding. A lot of women thought that a small quantity of water was allowed in this feeding option, and there was a heterogeneous opinion about the ideal duration of this option.

**Attitudes towards EBF**

The attitudes of women towards exclusive breastfeeding were often negative: 62 per cent said they would not feed their child exclusively with breastmilk during the first months of life, while 34 per cent would do so if told. Four per cent were undecided. The reasons why the women were against EBF were often related to the supplementation with water. ‘The infant needs water’, ‘the infant is thirsty’, ‘breast milk isn’t enough’, ‘water is essential’, ‘the entourage would blame us’ were the often mentioned justifications for not agreeing with EBF.

**Potential acceptance of the alternatives to BF**

The women were asked how they would react if they had an illness that could be transmitted through breastmilk and the following options were suggested to them: early weaning, pasteurization of breastmilk, wet-nursing, and exclusive use of breastmilk substitutes.

The majority (74 per cent) of them agreed with an early weaning after 3 months. The rest would either

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Socioeconomic data of the women interviewed (n=210) in Abidjan, May 2001</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Mothers (n=160)</td>
</tr>
<tr>
<td>Age, median (interquartile range)</td>
<td>24 (21–29)</td>
</tr>
<tr>
<td>Education level (%)</td>
<td></td>
</tr>
<tr>
<td>Any school</td>
<td>37.3</td>
</tr>
<tr>
<td>Grammar school</td>
<td>34.7</td>
</tr>
<tr>
<td>Secondary education</td>
<td>20.0</td>
</tr>
<tr>
<td>University</td>
<td>8.0</td>
</tr>
<tr>
<td>Occupation (%)</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>59.3</td>
</tr>
<tr>
<td>School</td>
<td>6.7</td>
</tr>
<tr>
<td>Housewife</td>
<td>34.0</td>
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<tr>
<td>Own water supply (%)</td>
<td></td>
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<tr>
<td>62.0</td>
<td>66.7</td>
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<tr>
<td>Living with a partner (%)</td>
<td>76.0</td>
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<td>No. of children born, median (interquartile range)</td>
<td>2 (1–3)</td>
</tr>
</tbody>
</table>
wean first after 4 or 6 months (2 per cent), would not breastfeed at all (14 per cent), or would not stop breastfeeding early (10 per cent). The attitudes towards breastmilk substitutes were positive for 88 per cent of the women. Eighty-three per cent of the women would accept an exclusive use of breastmilk substitutes from birth, 5 per cent only sometimes after birth, and the others (12 per cent) would not choose this option at all. The women who opposed the use of breastmilk substitutes argued against this option: ‘breast milk substitutes are bad’, ‘they are expensive’, ‘the mother–child contact would be insufficient’, ‘they are difficult to prepare’, and ‘the child wouldn’t love or recognize his mother’.

The majority of the women (63 per cent) were against the option of wet-nursing. Only 37 per cent would accept a wet-nurse to breastfeed their child, and among these 11 per cent mentioned the health and/or the relationship of the wet-nurse as a condition for agreeing. The reasons for rejecting this feeding option were the following: ‘there’s a blood incompatibility between the child and the wet-nurse’, ‘I don’t have any faith in a wet-nurse’, ‘the wet-nurse can be ill’, ‘the contact between the child and the mother would be insufficient’, ‘the child would be sick’, ‘the child wouldn’t recognize his mother’, ‘we don’t do this in our culture’.

An eventual pasteurization of the mother’s milk was well accepted among the women. Seventy-six per cent would be ready to boil their milk even if among these, 10 per cent said they would do so only if the method is sure and/or someone shows them how to apply it. The remaining 24 per cent couldn’t imagine pasteurizing their milk. They explained their refusal through the fact that this procedure is ‘difficult’, ‘not sure’, ‘unknown’ and ‘not natural’.

**Discussion**

Breastmilk provides a healthy infant with all nutrients, fluids and energy needed in the first 6 months of life. An early introduction of different liquids or weaning foods increases the frequency of diarrhoea and respiratory diseases, particularly in areas with poor hygiene. In the case of HIV, exclusive breastfeeding can also lower the mother-to-child transmission risk through breastmilk. This option is therefore recommended for mothers both with or without the HIV infection.

Unfortunately, the introduction of this feeding option can be difficult in Abidjan. In this study the idea of exclusive breastfeeding was not well accepted. Water, especially, was felt to be a necessary supplement, and this can explain the low EBF rate reported earlier in Abidjan and elsewhere in Africa. Obviously the promotion of EBF has failed. The women interviewed in Abidjan were well informed about the benefits of breastfeeding in general, but few had heard about exclusive breastfeeding and knew what it really meant.

For the future of PPTCT, the training of the health staff on EBF will be important. This includes adjusting the content of the messages delivered. The peer-counselling, which has shown its efficacy in others contexts, could also be a means to attract the vulnerable population and the specific group of HIV-infected women in Abidjan. Only with an appropriate EBF promotion and a rigorous follow-up can one hope to change the current attitudes and practices towards exclusive breastfeeding.

Women in Abidjan favour the use of breastmilk substitutes very much, they also favour early weaning and pasteurization of expressed breastmilk, and they are opposed to wet-nursing (Fig. 1). As efficacy of pasteurization has already proved reliable and is

![Fig. 1. Acceptance rates of different infant feeding options with PPTCT (n = 210) in Abidjan, May 2001.](image-url)
well received by the female population, its implementation should not be excluded in a place like Abidjan. However, it is necessary to adapt technologies used elsewhere to the local environment.

Wet-nursing is considered more difficult in the African context in general. Seventy-one percent of women interviewed in Nigeria did not accept it. Those agreeing to wet-nursing would consider it as an option only if the wet-nurse was a relative. The reported reasons for this attitude are cultural—just like those of Abidjan. The symbolic value attached to human milk sets a serious obstacle, which is important to take into account.

Despite a long breastfeeding duration in the Ivory Coast in general, early weaning was well accepted among the women of Abidjan. As in Uganda, the majority reported being ready to wean their child after 3 months in the case of an illness.

Both breastmilk substitutes and early weaning have already been considered in PPTCT pilot programs in the Ivory Coast. The question is much less the acceptability of the substitutes than the feasibility and safety. Problems still to be resolved are the tendency to mixed breastfeeding, which is known to be associated with increased risks, the discrimination due to not breastfeeding, and the cost of the breastmilk substitutes. For the implementation of the early weaning strategy, it will be necessary to emphasize keeping the transition period short and providing the child with appropriate and hygienically prepared weaning foods.

References