

Research Article

Protecting both infant and mother: perceptions of infant feeding practices in rural Haiti

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Background

Global recommendations for optimal breastfeeding include early initiation, exclusivity for six months, and continued breastfeeding for two years and beyond. Although breastfeeding is near universal in Haiti, gaps in optimal practices persist. Determinants of breastfeeding practices are complex, and a contextualized understanding is needed to strengthen breastfeeding support interventions. We conducted a qualitative study to explore mothers' perceptions of factors influencing breastfeeding practices in rural Haiti.

Methods

Focus group discussions were held in eight rural communes participating in a nutrition project. Study participants (n=86) were recruited from mothers' support groups. A moderator facilitated the focus groups in Haitian Creole using a question guide to elicit observations about community breastfeeding practices related to early initiation, colostrum feeding, complementary foods and beverages, and breastfeeding cessation. Focus groups were recorded, and three observers took notes which were compiled into a single report of key points and validated by participants following each session. Quotes representing the key points were selected from the audio recordings, translated into English and analyzed to identify explanatory themes.

Results

Participants described breastfeeding for 12-18 months as the norm in study areas, with early and frequent use of additional foods and beverages. Three explanatory themes were identified, related to concerns for (i) infant well-being, including digestive health, nutritional needs and contentment; (ii) transmission of negative maternal emotional and physical states through breast milk; and (iii) maternal well-being, including effects on breastfeeding practices of maternal illness, hunger, stress, and competing time pressures. Underlying all these concerns is the context of rural poverty and the cultural meanings of breastfeeding.

Conclusions

Findings suggest that practices which compromise global breastfeeding recommendations may persist because of their perceived value in addressing concerns for infant and maternal well-being in the challenging context of rural poverty, food insecurity and poor health. Multi-sectoral interventions are needed to mitigate these underlying contributors and create an enabling environment for early, exclusive and continued breastfeeding.

Breastfeeding provides optimal infant nutrition, supporting growth and lifelong health.¹ The World Health Organization recommends early initiation of breastfeeding (within one hour of birth), exclusive breastfeeding (no other foods or liquids, except essential vitamins, minerals and medicines) for the first six months of life, and continued breastfeeding with complementary feeding to two years and beyond.² Sub-optimal practices, particularly non-exclusive

breastfeeding, are associated with over 800 000 preventable child deaths per year, increased morbidity across the lifespan, and increased maternal cancer risk.¹ The determinants of breastfeeding practices are complex. Globally, major reasons for sub-optimal breastfeeding include maternity care practices, lack of social and workplace support for breastfeeding, concerns about breastmilk adequacy, maternal illness and competing demands on maternal time.^{3,4}

Breastfeeding is universal in Haiti, with national data for 2016-17 showing initiation rates over 95% and a median duration of any breastfeeding of 16.7 months, but low rates of exclusivity and early initiation (47%).⁵ The latter can be partially attributed to the traditional practices of discarding colostrum and administering a cleansing mixture called *lòk* to newborns.⁶ A national campaign discouraging the use of *lòk* led to a dramatic increase in the proportion of infants under six months receiving exclusive breastfeeding, from 1% in 1994 to 41% by 2005-06.⁷ The rate remained around 40% in 2016, and the infant mortality rate of 59 per 1,000 live births has also changed little since 2005-06.⁵ Qualitative studies in Haiti have reported perceptions that the quality of breastmilk deteriorates due to negative maternal physical or emotional states, such as illness or stress, which can affect adherence to optimal breastfeeding practices.^{6,8} In some areas, children around one year of age are transferred to the care of others in the community so that mothers return to their labour.⁹

The *Appui prénatal, périnatal, postnatal et nutritionnel* (A3PN) project was implemented in eight rural communes in Haiti from April 2016-March 2020, to reduce infant and maternal mortality through improved nutrition, health and food security. Analysis of project cross-sectional data found 68% exclusive breastfeeding among infants under six months, with determinants including younger infant age, early initiation of breastfeeding, improved maternal dietary diversity and nutrition status, and region of residence.¹⁰ This paper presents findings from a qualitative study with mothers in A3PN project communes. The objective was to develop a contextualized understanding of breastfeeding practices and identify factors influencing adherence to global recommendations.

METHODS

STUDY SETTING

This qualitative study was conducted within the A3PN project, which implemented breastfeeding promotion as the focus of two out of twelve mothers' support group meetings facilitated by a Community Health Worker (CHW) and peer educator. Other activities to promote and support breastfeeding were monthly home visits, mobile health clinics and community learning activities. The A3PN project was implemented in eight rural communes, three of which (Saint-Jean-du-Sud, Camp-Perrin and Chantal) are in the South Department, within 25 km of the town of Les Cayes. The remaining five are in the Grand'Anse Department: three (Moron, Roseau and Corail) within 45 km of the town of Jérémie, and two (Anse d'Hainault and Les Irois) in the Anse d'Hainault region. The study locations are referred to hereafter as Les Cayes, Jérémie and Anse d'Hainault. Further information on the study setting and A3PN project activities has been described previously.¹⁰

PARTICIPANTS

From April 3 to May 13, 2017, one 1.5-hour focus group on breastfeeding practices was conducted with mothers in

each commune. A general invitation was issued to mothers' support group members, and individuals who self-identified or were recommended by the community as knowledgeable of local perinatal health realities were recruited.

ETHICS

Ethical approval was granted by the Comité d'éthique de la recherche en santé (CERES) of the Université de Montréal and the Comité National de Bioéthique in Haiti. Participants were given informed consent forms written in Haitian Creole, which were read to them by the moderator. The moderator documented verbal consent obtained from each participant, and a printed copy of the study details and contact information was given to participants. To ensure anonymity, pseudonyms rather than participant names are reported, and the region name (Les Cayes, Jérémie, Anse d'Hainault) is used rather than that of the commune so that participants cannot be identified.

DATA COLLECTION AND ANALYSIS

The focus groups were held in the usual meeting areas of the mothers' support groups. They were conducted in Haitian Creole by a moderator (a nurse from the community) with three observers (two dietitians and a CHW), all of whom were known to participants as they led the regular group meetings. The nurses and CHWs were experienced facilitators of group discussions on infant feeding, and the dietitians had university training in qualitative research methods. Before data collection, all research personnel were trained on the purpose of the study, appropriate use of the guiding questions and best practices for focus group discussions.

During the focus group discussions, beliefs and behaviours that could undermine early, exclusive and continued breastfeeding in the community were discussed to explore practices related to early initiation of breastfeeding, colostrum, prelacteal foods, the introduction of complementary foods, and breastfeeding cessation. The questions in [Table 1](#) formed the basis of the semi-structured discussions, with probing by the moderator to add clarity and depth. The observers did not participate in the discussion but took notes throughout, recording the main themes of the discussion and important non-verbal cues.

After all the questions were discussed, the moderator presented a summary of the key points from the observers' notes, which the participants were asked to validate. The moderator and observers then met to combine research notes. The entire focus group, including the post-meeting, was audio-recorded but full transcription and translation was not feasible within project resources. Instead, the focus group summaries prepared by the research team were cross-checked using citations from the audio recordings identified by two independent contractors not involved in the data collection. Participant quotes representing the key points in the written summaries were selected from the audio recordings and translated into English. These were used for deductive analysis and identification of explanatory themes related to breastfeeding practices.

Table 1. Question guide for focus groups conducted in Haitian Creole with mothers' support groups (April-May 2017)

Topic	Questions
Breastfeeding initiation	1. Do women in your community breastfeed their newborns within 1 hour of birth? 1.1 Why? 1.2 If not, about how long after childbirth do mothers tend to breastfeed their newborns? 2. Do members of your community tend to give colostrum (the first day's milk) to their newborns? 2.1 If not, why?
Exclusive breastfeeding	1. Do members of your community tend to give food or drink other than breast milk to newborns within the first three days of life? 1.1 Could you specify the type of food or drink? 1.2 Why are these foods offered? 2. How old are children in your community when they begin to receive food and beverages other than breast milk on a regular basis? 2.1 Before children begin to receive food and beverages other than breast milk on a regular basis, do they receive them from time to time? 2.2 When do children begin to occasionally receive food and beverages other than breast milk? 2.3 What types of food and beverages do children occasionally receive (before regularly receiving food and beverages other than breast milk)? 2.4 Why are these foods offered?
Breastfeeding duration	1. Until what age do children tend to be breastfed after the introduction of food and beverages other than breast milk? 1.1 If less than 2 years, why?
Breastfeeding cessation or not breastfeeding	1. Are there any circumstances when people feel that it is not good to give breastmilk to a child? 1.1 If so, could you please describe? 2. Are there other reasons mothers choose not to breastfeed their child? 2.1 If so, why?

RESULTS

A total of 86 mothers participated in the focus groups, with nine to fifteen per group. Breastfeeding practices described by participants are presented below, followed by the explanatory themes. While some variations in specific practices were reported, the explanatory themes were consistent across the dataset, indicating that saturation was attained.

BREASTFEEDING PRACTICES

Breastfeeding for 12-18 months was the norm in study areas. However, exclusive breastfeeding is not widely practised. Infants are regularly offered food and beverages other than breast milk starting at various ages: from birth to six months in Les Cayes, 2 to 12 months in Jérémie, and 1-3 months in Anse d'Hainault. Occasional provision of other food and liquids takes place before this. Foods offered in the first three days of life include lòk, teas and commercial infant cereal. Infants under three months of age are often offered porridge, bread soup, and infant formula.

EXPLANATORY THEMES

Participants provided various explanations for practices that do not align with global breastfeeding recommendations. These were grouped into three themes related to concerns for i) infant well-being, ii) transmission of maternal emotional and physical states through breast milk, and iii) maternal well-being.

CONCERNS FOR INFANT WELL-BEING: "BREAST MILK IS NOT SUFFICIENT"

Many reasons for sub-optimal breastfeeding practices reflect concerns for infant well-being, including digestive health, satisfaction of hunger, and contentedness.

Participants reported conflicting views regarding the early initiation of breastfeeding. Although many reported colostrum feeding as the norm, some still practice the tradition of discarding colostrum as it is believed to give the infant stomachache or diarrhoea.

"Every mother gives it [colostrum]. It's a long time ago, in my mother's time, old habits, they cleaned the breast, pressed it and threw it [colostrum] away." Nedji (Les Cayes)

"There are a lot of people who don't want to breastfeed the child. What makes her not want to breastfeed? She says

this: “when she gives the baby the yellow milk, she gives the baby diseases, she gives the baby diarrhoea”. That’s what they told me too. They told me that my milk was too yellow, so they didn’t want me to breastfeed the child.” Odette (Jérémie)

Pre-lacteal feeds were sometimes perceived to aid digestive health and facilitate contentment.

“There are people who have the habit of giving, during those three days, a little bit of castor oil to give to the child with a little sugar, a little nutmeg. They tell you that this food is to clean the tar [meconium] in the child’s belly.” Brigitte (Les Cayes)

“I saw a young woman who had a child near where I live, since the child is 2 days old, she makes soursop leaf tea, she gives her baby some, she gives her baby Gerber (commercial infant cereal).” Fabienne (Les Cayes)

“There is someone, she had a child, things are not easy for her, even sweetened water, since the child was born, she puts some in a bottle and gives it to the baby. So the baby does not yell, so the baby is not in a bad mood.” Bertha (Anse d’Hainault)

Reasons for the widespread practice of very early introduction of complementary foods included improving infant digestive health, satisfying hunger and meeting nutritional needs when breast milk is perceived to be inadequate.

“They always say that children cry, breast milk is too weak to give them. Give food to children so they don’t have flatulence.” Osana (Jérémie)

“They always say that the child cries a lot in the evening. Breastfeeding doesn’t do anything for the baby. Breast milk is not sufficient, now they are forced to give the baby food.” Guerline (Les Cayes)

“There are people too, sometimes it is nourisoy (commercial infant cereal) that they give to the child. Because they say there are vitamins in it, it is good for the child.” Guerdy (Anse d’Hainault)

Participants also reported that some mothers offer cow’s and goat’s milk because these are considered to be rich in vitamins and to give strength to the infant.

Reasons for breastfeeding cessation included concerns about breast milk’s nutritional adequacy and health risks associated with prolonged breastfeeding. Some reported healthy infant growth and development to be a sign that breastfeeding was no longer needed.

“Milk gets less nutritive with time, its vitamin content is reduced and the milk is no longer good for a child because it doesn’t give them strength.” Nadège (Les Cayes)

“They say that when you breastfeed the child for too long, the child is going to have worms. Breast milk contains worms. The child is going to have edema, his little feet will be swollen, his little hair will become yellow like ripened rice.” Ophelie (Jérémie)

“When the child starts walking, they don’t need to be

breastfed.” Alejandra (Jérémie)

“Some children can grow very well, they get very big then the mother is not able to breastfeed them anymore.” Beatriz (Jérémie)

CONCERNS FOR TRANSMISSION OF MATERNAL STATES THROUGH BREAST MILK: “HER MILK MIGHT NOT BE GOOD”

Many participants linked breastfeeding cessation to the need to protect the infant from negative maternal states, including infectious diseases.

“There is a lady nearby that has a disease which doesn’t allow her to breastfeed her kid because she could transmit it and the drugs she is taking could be too strong for the child.” Farah (Jérémie)

“In our community, there are diseases called AIDS, tuberculosis, syphilis and others that can be transmitted through breast milk. Doctors forbid these mothers to breastfeed their child in order to protect them from these diseases.” Cassandra (Anse d’Hainault)

Other participants described poor quality of breast milk resulting from a mother eating something harmful, sleeping away from home, or experiencing a stressful event. These conditions were described as turning the breast milk ‘sour’, causing harm to the child.

“Sometimes, the breast milk can be sour, and parents don’t want to feed the child with it. The mother can eat something that can affect her milk and disturb the child. When the milk is not good, the mother doesn’t breastfeed the child.” Madeline (Anse d’Hainault)

“When a mother goes out at night and sleeps away from home, she avoids breastfeeding her child because the milk turned sour.” Gaelle (Jérémie)

“When a mother is going through an emotional shock, her milk might not be good for her child. It can even cause the child to have diarrhea and vomiting. The mother can use a plant remedy so that the milk gets better and she can continue breastfeeding.” Karina (Les Cayes)

Breastfeeding while pregnant was thought to pose health risks to infants, while some participants identified the desire to delay pregnancy as a reason to prolong breastfeeding.

“Some mothers get pregnant while breastfeeding and it makes the child sick. We can see him with swollen feet.” Astrid (Jérémie)

“When a mother is pregnant again, it is said that her milk is not good for the child she is breastfeeding.” Antonella (Les Cayes)

“If the mother is pregnant and the child she is breastfeeding has diarrhoea, she will stop feeding him.” Dana (Anse d’Hainault)

“There are some women that stop breastfeeding before

18 months because they get pregnant again after 7-8 months.” Darline (Jérémie)

“Some mothers keep breastfeeding their infants to avoid pregnancy.” Andera (Jérémie)

CONCERNS FOR MATERNAL WELL-BEING: “SHE MAY NOT BE ABLE TO BREASTFEED”

Participants frequently linked breastfeeding practices to concerns for maternal well-being, particularly in the context of ill health, time pressures and maternal hunger.

Barriers to early initiation of breastfeeding included difficult deliveries, maternal illness and insufficient breast milk.

“It depends on when the person finishes delivering. You don’t know what fatigue she has, she can have pain, she may not be able to breastfeed the child right after giving birth.” Rosie (Jérémie)

“There are mothers too that have the right to have difficulties, if they had a caesarean, after the caesarean, there is a number of days. The child must not be breastfed for three days... Sometimes, there are people who don’t have breast milk.” Frantzia (Les Cayes)

“If a mother is sick, when she gives birth with health problems, she is not supposed to breastfeed her child. For example, if she has a headache, breast abscess, tuberculosis or anemia.” Fanny (Jérémie)

Reasons for offering complementary foods early in infancy included maternal fatigue and lack of social support.

“The soursop tea, after you gave birth, after you arrange the bed, you prepare a soursop tea, you give it to the child, the child sleeps, you, the mother, you sleep too.” Brigitte (Les Cayes)

“There are people, the same day they make the children [give birth], they give them food. Even if you tell them no, they tell you: you are happy, you have a husband. According to them, it is food that is supposed to feed the child. In the community, a lot of people do that.” Widelene (Les Cayes)

Non-exclusive breastfeeding and early cessation of breastfeeding were also deemed necessary for mothers to attend to other responsibilities.

“There are people who don’t have time because if they give the baby formula, when the child cries, they can find someone to put the formula in their mouth for them and they continue their activities. But if it is [exclusive] breastfeeding, they must quit what they are doing to go breastfeed the child.” Ygnette (Les Cayes)

“Some mothers breastfeed their child during the day and when they lack time, they buy milk to feed them. They go back to breastfeeding at night.” Lovelie (Anse d’Hainault)

“Some mothers that sell at the market stop breastfeeding before 18 months. As soon as the child can walk, even be-

fore 18 months of age, the baby is weaned off breast milk. Mothers that don’t work can breastfeed until 18 months.” Fatima (Anse d’Hainault)

Lastly, when asked about reasons for avoiding breastfeeding altogether, participants pointed to mothers’ lack of strength due to hunger, lack of time or motivation, personal factors, and body image concerns.

“Hunger makes mothers avoid breastfeeding. Some mothers wake up and spend the entire day without eating. In that case, they cannot even stand up so they cannot breastfeed. They don’t have enough resources to get something to eat.” Nephtalie (Jérémie)

“... I have three children, I breastfed only one. When I go for the vaccines, I see other mothers [and] we talk about breastfeeding. While encouraging them, [I ask them] why they don’t do it. Some tell me: “Mrs, you are wealthier than me. Hunger is already in my body. Where can I find breast milk to give to the child who suckles me all day long?” Most of them, that’s how they answer me.” Manise (Jérémie)

“Sometimes, ladies see themselves as superstars too, they don’t want to breastfeed their children so they can stay young ladies (physically). So their breasts do not flatten, so their breasts do not droop.” Jose (Jérémie)

DISCUSSION

In this qualitative study with rural Haitian mothers participating in the A3PN project, concerns related to infant and maternal well-being and transmission of harm through breast milk influenced adherence to global breastfeeding recommendations. Underlying these concerns is the tension between cultural and biomedical guidance regarding the adequacy of breast milk in the context of poverty and poor health. These findings align with prior research in Haiti,^{6,8,11} have parallels with other low-income settings globally and need to be considered in interventions promoting breastfeeding.^{4,12–14}

In contrast with current biomedical recommendations, study participants reported very early introduction and frequent use of foods and liquids in addition to breast milk as a strategy to promote infant well-being. Similar practices of supplementing breast milk with the aim of improving infant health, nutritional status, comfort and sleep have been reported in other settings.^{13,14}

In this study, concerns about transmission of harm to the infant through breast milk were applied to significant maternal illnesses such as HIV and tuberculosis, as well as to stress, new pregnancy, and other conditions perceived to cause breast milk to become ‘sour’. This concept is also called “bad blood” and refers to a perceived deterioration in breast milk quality due to negative maternal emotional or physical states.^{6,8,11} This illustrates the deeply held meaning of breastfeeding in Haitian culture, where it is an emotional and spiritual conduit between mother and child that can vary between being helpful and harmful.¹⁵ This contrasts with the biomedical recommendation of breast milk

as universally beneficial with rare exceptions,¹⁶ and explains the careful attention of Haitian families to any maternal characteristics that may affect breast milk. This has important implications for interventions promoting breastfeeding; a sensitive understanding of cultural meanings of breastfeeding is essential for effective and respectful knowledge exchange.¹⁵ This also highlights the need to strengthen HIV prevention and management in Haiti.¹⁷

Time pressures related to competing maternal responsibilities, particularly income-earning roles, were also reported as reasons for early cessation and non-exclusive breastfeeding. Infant feeding must be understood in the larger context of mothers' lives, which in this study included rural poverty and informal work without maternal supports for breastfeeding. These conditions require a balanced allocation of maternal resources between the infant's need for breast milk and the household's need for income and food security.¹⁸

Study participants also noted that mothers facing food insecurity or malnutrition could not breastfeed adequately. This aligns with our previously reported finding that exclusive breastfeeding was associated with maternal nutritional status, assessed through dietary diversity and mid-upper arm circumference.¹⁰ Although sufficient breast milk production is attainable except in situations of extreme malnutrition, maternal stores are depleted in favour of the infant, and breastfeeding can be experienced as exhausting.¹⁹ Concerns regarding the quantity and nutritional quality of breast milk have been reported by food insecure mothers in various settings, including urban Haiti.^{11,20–22} Food insecurity also affects maternal mental health, which is associated with sub-optimal breastfeeding practices.^{23,24} These findings highlight the need to strengthen support for maternal nutrition and household food security in conjunction with initiatives promoting breastfeeding.

A strength of this study is the inclusion of participants from eight communes in three regions of Haiti, providing rich and varied insights, although findings may not be generalizable to other areas. Focus group discussions were conducted by community health personnel familiar to participants, which may have enhanced openness and comfort. Since the moderator and observers led breastfeeding promotion activities in the community, there might also have been an increased risk of social desirability bias. To mitigate this, participants were asked to discuss observations in the community rather than their personal experiences or practices, although they were free to disclose personal practices if they wished.²⁵ Participants reported a wide variety of practices which do not align with global breastfeeding recommendations, suggesting that social desirability bias was minimized. Resource constraints prevented full transcription and translation of the focus group audio recordings, which would have improved the rigour of the analysis, but written summaries of the focus groups were validated with participants and cross-checked with quotes identified in the audio recordings by two independent contractors.

CONCLUSION

This qualitative study with mothers in rural Haiti revealed that practices that hinder early, exclusive and continued breastfeeding might persist because of their perceived value in addressing concerns for infant and maternal well-being in the context of poverty, poor health and food insecurity. This provides valuable guidance for interventions aiming to increase adherence to global breastfeeding recommendations in such settings. The findings point to the importance and urgency of addressing the underlying contributors to infant feeding practices by utilizing multi-sectoral strategies to create an enabling environment for optimal breastfeeding practices.

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AUTHORSHIP CONTRIBUTIONS

SD and MB conceived the original idea, planned the study, and coordinated data collection. AM and SD led the interpretation of the data with contributions from all co-authors, and wrote the manuscript. BS supported the implementation of research activities in Haiti. All authors contributed significantly to the intellectual contents of the article and reviewed and approved the final version.

COMPETING INTERESTS

The authors completed the Unified Competing Interest form at <http://www.icmje.org/disclosure-of-interest/> (available upon request from the corresponding author) and declare no conflicts of interest.

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